				ES		AMEN	FC	ORT							
		APP	LICATION F	OR	PERM	IIT TO DRILL	-				1. WELL NAME and		R 22-11J1CS		
2. TYPE C		RILL NEW WELL (REENTE	R P&	Δ WFII	DEEPE	N WELL				3. FIELD OR WILDO		L BUTTES		
4. TYPE C			_			hane Well: NO					5. UNIT or COMMU	NITIZA [.]		EEMENT	NAME
6. NAME	OF OPERATOR	t .	RR-MCGEE OI								7. OPERATOR PHO	NE	29-6515		
8. ADDRE	SS OF OPERA	TOR	P.O. Box 17377			<u> </u>					9. OPERATOR E-MA	IL	@anadarko	.com	
	RAL LEASE NI L, INDIAN, OF	JMBER			11. M	INERAL OWNE			======================================	0	12. SURFACE OWN	ERSHIP		_	
	·	JO1197A-ST OWNER (if box :	12 = 'fee')		FEDE	RAL IND	IAN () STATE (EE ()	14. SURFACE OWN	DIAN (STATI		FEE () ee')
15. ADDR	ESS OF SURF	ACE OWNER (if b	ox 12 = 'fee')							16. SURFACE OWN	ER E-MA	AIL (if box	12 = 'f	ee')
17 INDI	AN ALLOTTEE	OR TRIBE NAME			18. II	NTEND TO COM	IMINGL	E PRODUCT	ION FR	ОМ	19. SLANT				
	2 = 'INDIAN')				MULT YES	IPLE FORMATI (Submit C		gling Applicat	ion) N	o 🔵	VERTICAL DIF	RECTION	AL 📵	HORIZON	NTAL 🛑
20. LOC	ATION OF WE	LL		FO	OTAGE	ES	QT	R-QTR	SE	CTION	TOWNSHIP	R	ANGE	МЕ	RIDIAN
LOCATIO	ON AT SURFAC	CE	199	90 FS	SL 213	30 FEL	١	NWSE		11	10.0 S	2	2.0 E		S
Top of U	ppermost Pro	ducing Zone	200	55 FS	SL 179	97 FEL	Ŋ	NWSE		11	10.0 S	2	2.0 E		S
At Total	Depth		200	55 FS	SL 179	97 FEL	1	NWSE		11	10.0 S	2	2.0 E		S
21. COUN	ITY	UINTAH			22. D	ISTANCE TO N		T LEASE LIN 725	E (Feet	:)	23. NUMBER OF AC		DRILLIN 674	UNIT	
						ISTANCE TO N lied For Drilling	g or Co		AME PO	OOL	26. PROPOSED DEF		TVD: 95	36	
27. ELEV	ATION - GROU	JND LEVEL 5079			28. B	OND NUMBER	2201	13542			29. SOURCE OF DR WATER RIGHTS AP	PROVA		IF APP	LICABLE
					Н	lole, Casing,	and C	ement Inf	ormati	ion					
String	Hole Size	Casing Size	Length		ight	Grade & Thread Max Mud Wt.			Cement Type V		Sacks	Yield	Weight		
Surf	11	8.625	0 - 2080		8.0	J-55 L18	XC	0.2		-	Type V Class G		180 270	1.15	15.8 15.8
Prod	7.875	4.5	0 - 9613	1	1.6	HCP-110	I T&C	13.	.0	Prem	nium Lite High Stre	nath	260	3.38	11.0
	7.070	5	0 3010		-10			10.		1	50/50 Poz		1440		14.3
						A	ГТАСН	IMENTS							
	VERIFY T	HE FOLLOWIN	G ARE ATT	СНІ	ED IN	I ACCORDAN	CE WI	TH THE U	тан о	IL AND (GAS CONSERVATI	ON GE	NERAL F	RULES	
w wi	ELL PLAT OR	MAP PREPARED E	BY LICENSED	SUR	VEYOR	R OR ENGINEE	R	№ сом	IPLETE	DRILLING	i PLAN				
AFI	FIDAVIT OF S	TATUS OF SURFA	CE OWNER A	GREI	EMENT	Γ (IF FEE SURF	ACE)	FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
DRILLED)		URVEY PLAN (IF	DIRECTIONA	LLY (OR HO	PRIZONTALLY		№ торо	OGRAPH	IICAL MAI	P				
NAME Ar	/st			PHONE	720 929-6100										
SIGNAT	JRE			С	DATE 0	08/10/2011				EMAIL a	ndrew.lytle@anadarko	o.com			
API NUMBER ASSIGNED 43047518430000 APPROVAL										Pern	OCCHAIL mit Manager				

NBU 1022-11J PAD

Drilling Program

1 of 8

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-11J1CS

Surface: 1990 FSL / 2130 FEL NWSE BHL: 2065 FSL / 1797 FEL NWSE

Section 11 T10S R22E

Unitah County, Utah Mineral Lease: UO1197A-ST

ONSHORE ORDER NO. 1

DRILLING PROGRAM

Estimated Tops of Important Geologic Markers: Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	872	
Birds Nest	1228	Water
Mahogany	1627	Water
Wasatch	4018	Gas
Mesaverde	6278	Gas
MVU2	7246	Gas
MVL1	7794	Gas
Sego	8415	Gas
Castlegate	8543	Gas
MN5	8986	Gas
TVD	9586	
TD	9613	

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program

4. <u>Proposed Casing & Cementing Program:</u>

Please refer to the attached Drilling Program

5. <u>Drilling Fluids Program:</u>

Please refer to the attached Drilling Program

NBU 1022-11J PAD Drilling Program 2 of 8

6. Evaluation Program:

Please refer to the attached Drilling Program

7. <u>Abnormal Conditions</u>:

Maximum anticipated bottom hole pressure calculated at 9586' TVD, approximately equals 6,370 psi (0.66 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,262 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the attached Drilling Program. Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- · Blowout Prevention Equipment (BOPE) requirements;
- · Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

NBU 1022-11J PAD Drilling Program
3 of 8

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMC well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

NBU 1022-11J PAD

Drilling Program

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on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooic line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. <u>Other Information:</u>

Please refer to the attached Drilling Program.

NBU 1022-11J PAD

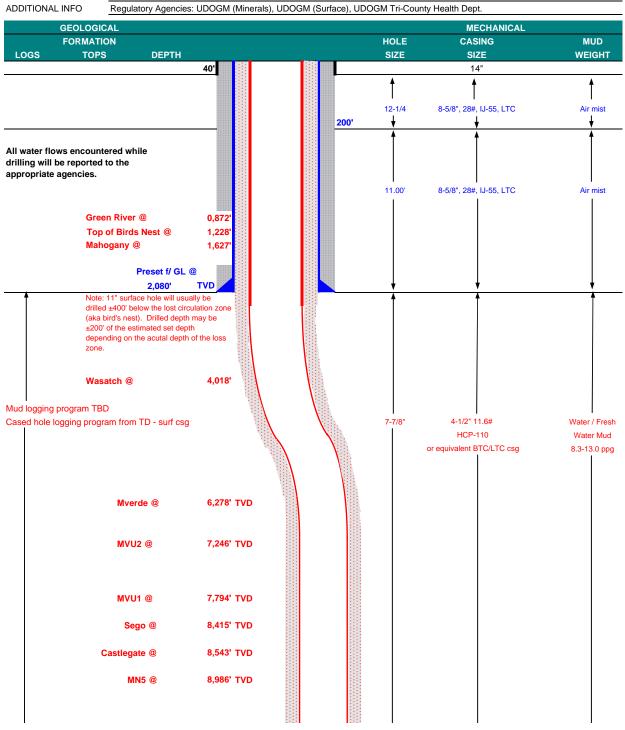
Drilling Program

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KERR-McGEE OIL & GAS ONSHORE LP <u>DRILLING PROGRAM</u>

COMPANY NAME KERI									
WELL NAME NBU	J 1022-11	J1CS			TD	9,586'	TVD	9,613' MD	<u> </u>
FIELD Natural Buttes	3	COUNTY	Uintah	STATE Uta	h	F	INISHED ELEVATION	5078'	
SURFACE LOCATION	NWSE	1990 FSL	2130 FEL	Sec 11	T 10S	R 22E			
	Latitude:	39.96171	Longitud	le: -109.40	4686		NAD 27		
BTM HOLE LOCATION	NWSE	2065 FSL	1797 FEL	Sec 11	T 10S	R 22E			
	Latitude:	39.961917	Longitud	e: -109.40	3497		NAD 27		
OBJECTIVE ZONE(S)	Wasatch/M	esaverde	•		•				
ADDITIONAL INFO	Regulatory	Agencies: UDC	GM (Minerals), UDOGM (Surface),	UDOGM T	ri-County Health Dept.		





Drilling Program

NBU 1022-11J PAD 7 of 8



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

DESIGN FACTORS CASING PROGRAM втс CPLG. COLLAPSE SIZE **INTERVAL** GR. **BURST TENSION** CONDUCTOR 14" 0-40' 3,390 1,880 348,000 N/A SURFACE 8-5/8" 28.00 IJ-55 2.080 1.93 0 LTC 2.60 6.82 N/A to 8,650 10,690 279,000 367,000 HCP-110 **PRODUCTION** 4-1/2" 0 9,613 11.60 LTC or BTC 1.19 1.33 3.12 4.11 to

Surface Casing:

0.73 psi/ft = frac gradient @ surface shoe (Burst Assumptions: TD = 13.0 ppg)

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

0.66 psi/ft = bottomhole gradient (Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi)

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1		+ 0.25 pps flocele				
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
		+ 2% CaCl + 0.25 pps flocele				
SURFACE		NOTE: If well will circulate water	to surface, o	ption 2 will l	oe utilized	
Option 2 LEAD	1,580'	65/35 Poz + 6% Gel + 10 pps gilsonite	150	35%	11.00	3.82
		+ 0.25 pps Flocele + 3% salt BWOW				
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
		+ 0.25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION LEAD	3,513'	Premium Lite II +0.25 pps	260	20%	11.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
TAIL	6,100'	50/50 Poz/G + 10% salt + 2% gel	1,440	35%	14.30	1.31
		+ 0.1% R-3				

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:		DATE:	
	Nick Spence / Danny Showers		
DRILLING SUPERINTENDENT:		DATE:	
	Kenny Gathings / Lovel Young		

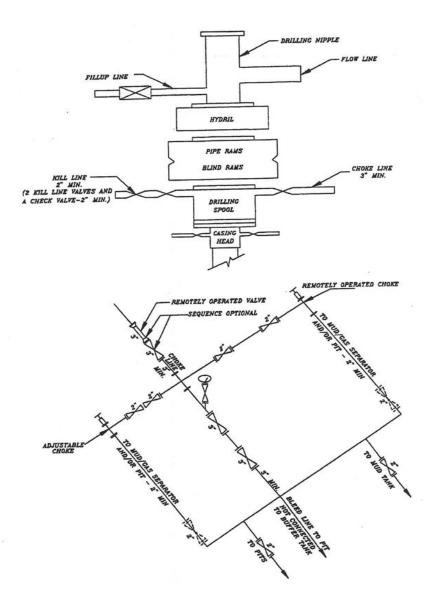
^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

NBU 1022-11J PAD

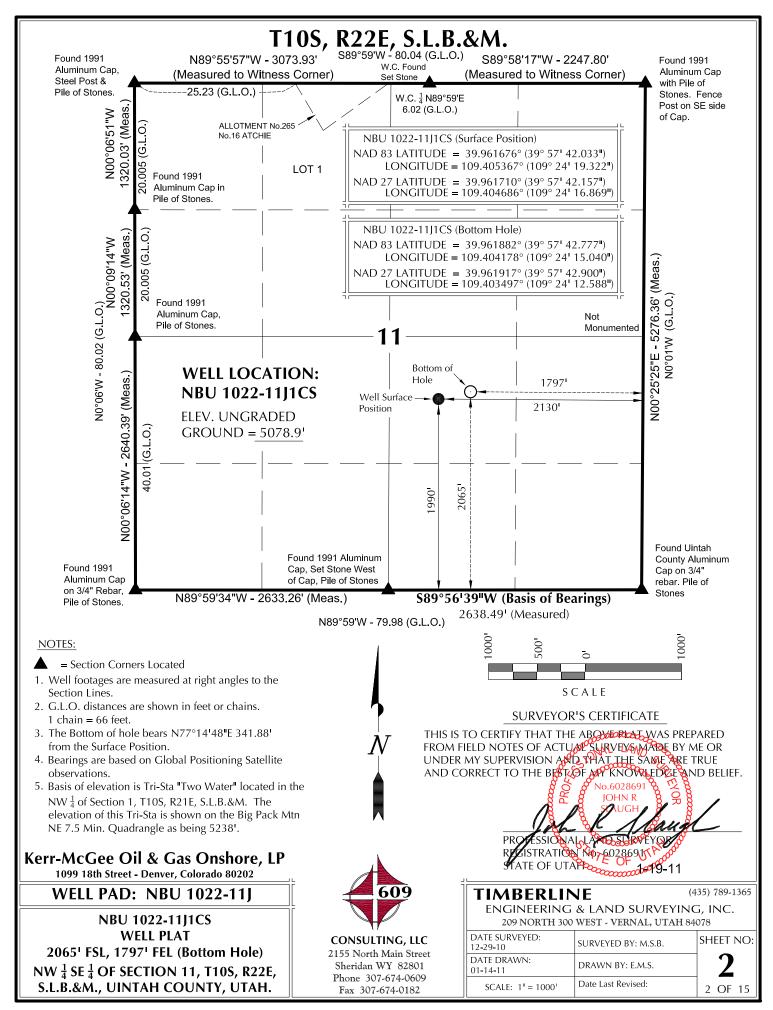
EXHIBIT A

Drilling Program
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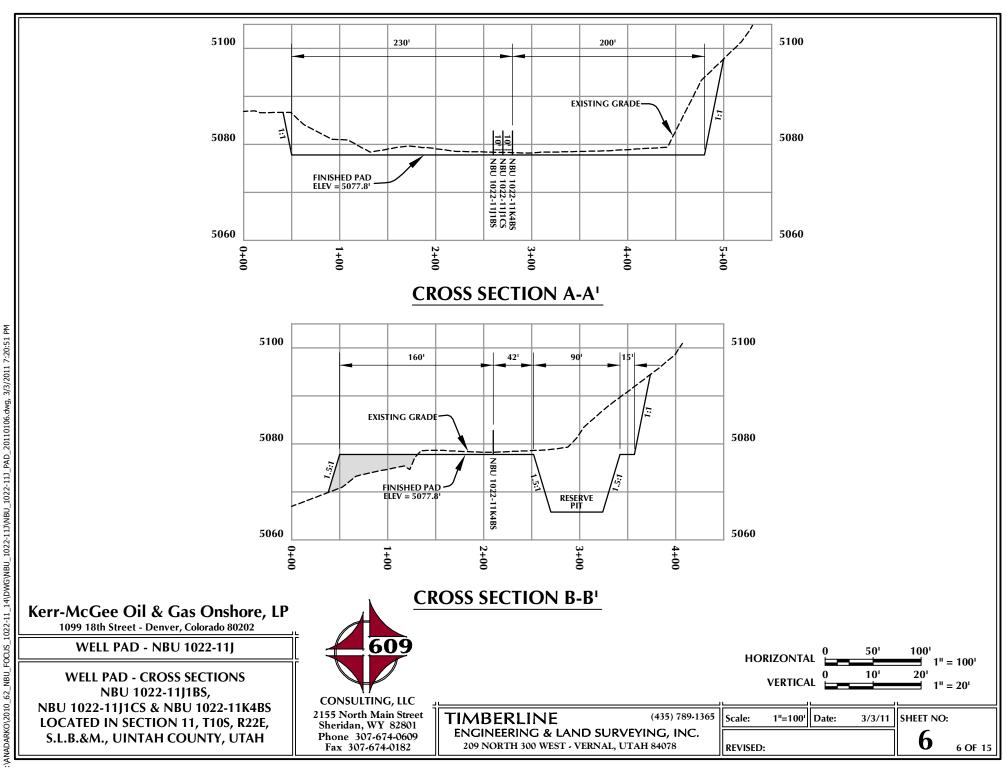
EXHIBIT A NBU 1022-11J1CS

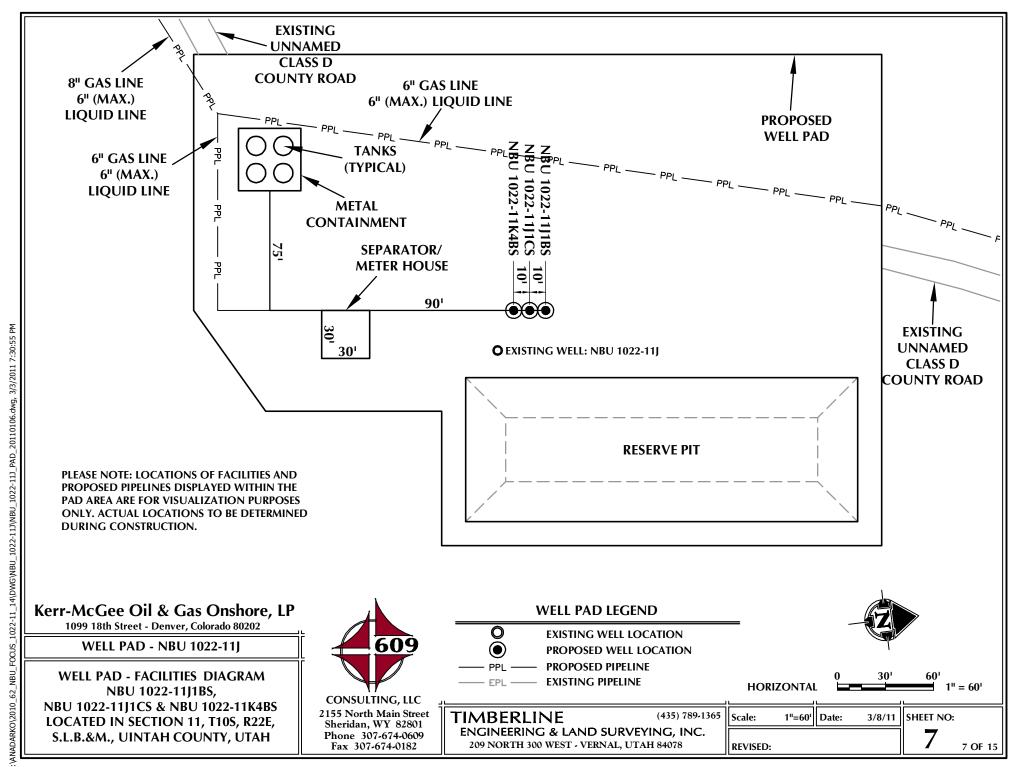


SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



			SURFACE PO			BOTTOM HOLE								
WELL NAME	NAI		DE 1	NAD27	CITUE	F0674 555		AD83	CITUE		NAD27 ATITUDE LONGITUDE F			
NBU	39°57'42.131"	109°24'19.			GITUDE 4'16.854"	FOOTAGES 2000' FSL	39°57'46.03		GITUDE 4'15.018"	39°57'46.161"				
1022-11J1BS	39.961 <i>7</i> 03°	109 24 19.	, , ,		4 16.654 04682°	2129' FEL	39.962788°	1.00 =	4 13.016 04172°	39.962822°	109.403491°	1798' FEL		
NBU	39°57'42.033"	109°24'19.		.157" 109°24	4'16.869"	1990' FSL	39°57'42.77	7" 109°2	4'15.040"	39°57'42.900"		" 2065' FSL		
1022-11J1CS	39.961676°	109.405367			04686°	2130' FEL	39.961882°		04178°	39.961917°	109.403497°	1797' FEL		
NBU 1022-11K4BS	39°57'41.935" 39.961649°	109°24'19. 109.40537			4'16.885" 04690°	1980' FSL 2131' FEL	39°57'40.20 39.961167°		4'34.689" 09636°	39°57'40.324" 39.961201°	109°24'32.236' 109.408954°	" 1804' FSL 1963' FWL		
NBU	39°57'41.807"	109°24'19.			4'16.582"	1967' FSL		1103.11	03030		100.10000	1700 1772		
022-11J	39.961613°	109.405287			04606°	2107' FEL								
			OORDINATES	1			1							
WELL NAME NBU	NORTH	EAST	NBU NAME	NORTH	EAS	NIDII		ORTH	EAST		7			
1022-11J1BS	395.5'	333.7'	1022-11J1CS	75.5'	333.4		11K4BS	76.4'	-1,195.6			1		
						AT NO	150° 17 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	62/00	.70			N N		
Az.		-116.//08	3° ^{26.9} ' NB (n Hole) (- 1208.50	U 1022-1	11J1BS 11J1CS 1K4BS	10, 10,	N77°	o Botto	om Hol	1022-11J	. — —			
Az.		To Bottor	3° ^{26.9} ' NB (n Hole) (- 1208.50	U 1022-1	11J1BS 11J1CS 1K4BS $M_{M} = 186.96944^{\circ}$	10:10:	N77°	o Botto	BASIS OF TH S.L.B GLOB	OF BEARING HE SE ¹ / ₄ OF SEC &M. WHICH I BAL POSITION	S IS THE SOU CTION 11, T10 IS TAKEN FRO IING SATELLIT D BEAR S89°56	OS, R22E, M E		
	S81°	To Bottor 236'32"W AZ=261	3° 26.9' NBI n Hole) 1 - 1208.50 .60889°	U 1022-1	1171CS 1K4BS 1K4BS 186.969440	10:10:	N77°	o Botto	BASIS OF TH S.L.B GLOB	OF BEARING HE SE \(\frac{1}{4}\) OF SEC &M. WHICH I BAL POSITION RVATIONS TO	CTION 11, T10 IS TAKEN FRO IING SATELLIT D BEAR S89°56	OS, R22E, M E		
Kerr-McO	Gee Oil &	Fo Bottor Fo Bottor F36'32"W AZ=261	9nshore,	U 1022-1	1171CS 1K4BS 1K4BS 186.969440	10:10:	N77°	WELL	BASIS OF TH S.L.B.G GLOB OBSEI	OF BEARING HE SE \(\frac{1}{4}\) OF SEC &M. WHICH I BAL POSITION RVATIONS TO	CTION 11, T10 IS TAKEN FRO IING SATELLIT D BEAR S89°56	OS, R22E, M E E 5'39 " W.		
Kerr-Mc(Gee Oil &	Fo Bottor 236'32"W AZ=261	9nshore, ado 80202	U 1022-1	1171CS 1K4BS 1K4BS 186.969440	10.10	EXISTING	WELL.	BASIS OF TH S.L.B.C GLOB OBSEI	OF BEARING HE SE \(\frac{1}{4}\) OF SEC &M. WHICH I BAL POSITION RVATIONS TO	CTION 11, T10 IS TAKEN FRO IING SATELLIT D BEAR S89°56	OS, R22E, M E 5'39"W.		
Kerr-Mc(Gee Oil &	Fo Bottor 236'32"W AZ=261	9nshore, ado 80202	U 1022-1	1171CS 1K4BS 1K4BS 186.969440	10:10:	EXISTING	WELL.	BASIS OF TH S.L.B.G GLOB OBSEI	OF BEARING HE SE \(\frac{1}{4}\) OF SEC &M. WHICH I BAL POSITION RVATIONS TO	CTION 11, T10 IS TAKEN FRO IING SATELLIT D BEAR S89°56	OS, R22E, M E 5'39"W.		
Kerr-McC 1099 18 WEL	Gee Oil & S81	To Bottor 36'32"W AZ=261 NBU 10	Onshore, ado 80202	U 1022-1	1171CS 1K4BS 1K4BS 186.969440	10.10	EXISTING	WELL:	BASIS OF TH S.L.B.G GLOBSEI	OF BEARING HE SE \(\frac{1}{4}\) OF SEC &M. WHICH I HAL POSITION RVATIONS TO S C A L E IN E IG & LAND	CTION 11, T10 IS TAKEN FRO NING SATELLIT D BEAR S89°56	OS, R22E, M TE 6'39"W.		
Kerr-McC 1099 18 WEL WELL P	Gee Oil & S81 SH Street - De L PAD - NEAD INTE	G Gas Conver, Color NBU 10	Onshore, ado 80202 22-11J	U 1022-1	11.1Cs 11.1cs 11	609	EXISTING	WELL: OBOTTO FIME ENGII 209	BASIS OF TH S.L.B GLOB OBSEI	OF BEARING HE SE \(\frac{1}{4}\) OF SEC &M. WHICH I HAL POSITION RVATIONS TO S C A L E IN E IG & LAND	CTION 11, T10 IS TAKEN FRO IING SATELLIT D BEAR S89°56	OS, R22E, M TE 5'39"W.		
Kerr-McC 1099 18 WELL P WELL P	Gee Oil & S81 SH Street - De L PAD - NEU SELS - NBU	Gas Conver, Color NBU 10 RFEREN 1022-11	Onshore, ado 80202 22-11J NCE PLA J1BS,	LP	1171CS 1171CS 1184BS 1184BS 1180-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	609 ULTING, LL	EXISTING	WELL OBOTT WELL OBOTT OBOT	BASIS OF TH S.L.B GLOB OBSEI	OF BEARING HE SE \(\frac{1}{4}\) OF SEC &M. WHICH I HAL POSITION RVATIONS TO S C A L E IN E IG & LAND	CTION 11, T10 IS TAKEN FRO SING SATELLIT D BEAR S89°56	OS, R22E, M TE 5'39"W.		
Kerr-McC 1099 18 WEL WELL P WE NBU 102:	Gee Oil & S81 Street - De L PAD - NELLS - NBU 2-11J1CS &	G Gas Conver, Color NBU 10 RFEREN 1022-11	Onshore, ado 80202 22-11J NCE PLA J1BS, D22-11K4E	LP T	1)1CS 1K4BS M ₁ 01 ₁ 82 ₀ 90S 	609 ULTING, LLE orth Main Street	EXISTING C DE TO TO THE TOTAL PROPERTY OF T	WELL: OBOTTO FIME ENGII 209	BASIS OF TH S.L.B.C GLOB OBSEI NEERIN NORTH 3 EYED:	OF BEARING HE SE \(\frac{1}{4} \) OF SEC &M. WHICH I HAL POSITION RVATIONS TO S C A L E INE IG & LAND 300 WEST - VER SURVEYED E	CTION 11, T10 IS TAKEN FRO SING SATELLIT D BEAR S89°56 SURVEYING RNAL, UTAH 84 BY: M.S.B.			
Kerr-McC 1099 18 WEL WELL P WE NBU 102: LOCATE	Gee Oil & S81 SH Street - De L PAD - NEU SELS - NBU	Gas Conver, Color NBU 10 RFEREN 1022-11 K NBU 10 ON 11,	Onshore, ado 80202 22-11J NCE PLA J1BS, D22-11K4E	LP T SS.E.,	1)1CS 1K4BS M ₁ 01.82.90S V ₂ 155 No Sherida	609 ULTING, LL	EXISTING C DITERITOR OF THE PROPERTY OF THE P	O BOTTO	BASIS OF TH S.L.B.C GLOB OBSEI NEERIN NORTH 3 EYED:	OF BEARING HE SE \$\frac{1}{4}\$ OF SEC &M. WHICH I SAL POSITION RVATIONS TO S C A L E IN E IG & LAND 300 WEST - VER	CTION 11, T10 IS TAKEN FRO SING SATELLIT D BEAR S89°56 SURVEYING RNAL, UTAH 84 BY: M.S.B.	OS, R22E, M TE 5'39"W.		





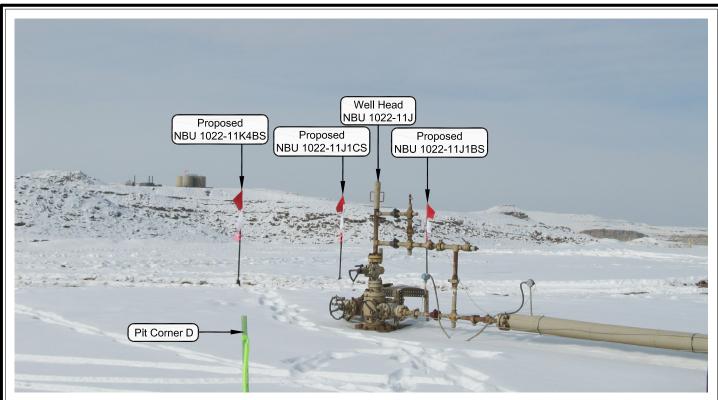


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



CAMERA ANGLE: NORTHEASTERLY

Kerr-McGee Oil & Gas Onshore, LP 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-11J

LOCATION PHOTOS NBU 1022-11J1BS, NBU 1022-11J1CS & NBU 1022-11K4BS LOCATED IN SECTION 11, T10S, R22E, S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC 2155 North Main Street Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

TIMBERLINE

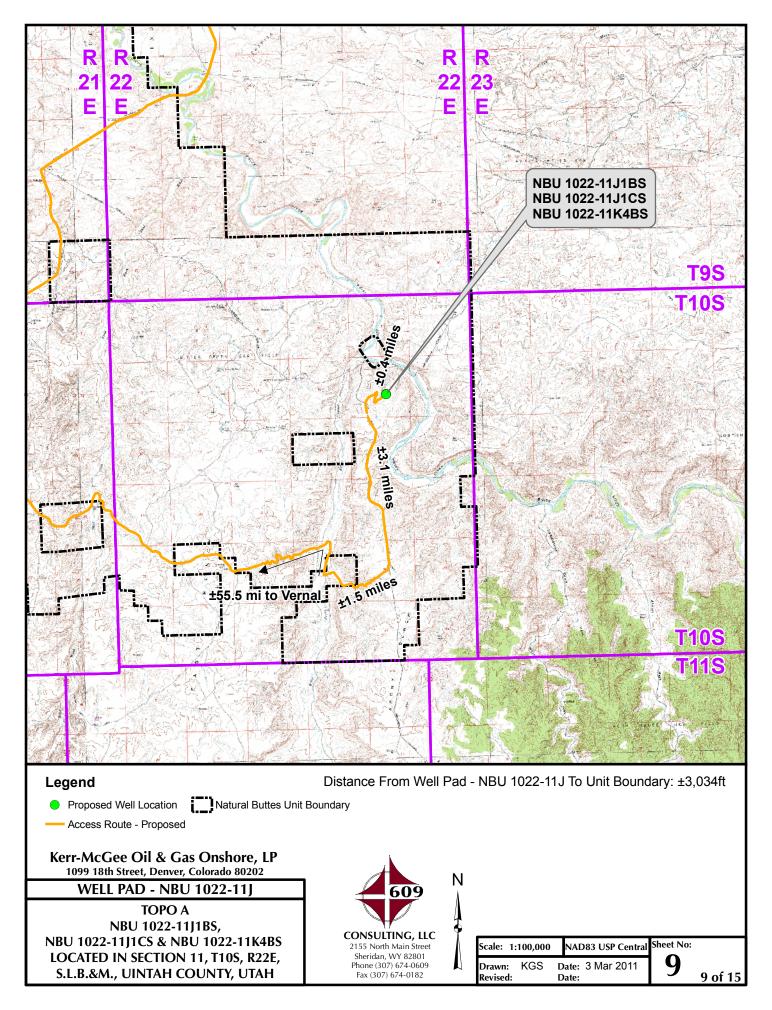
Date Last Revised:

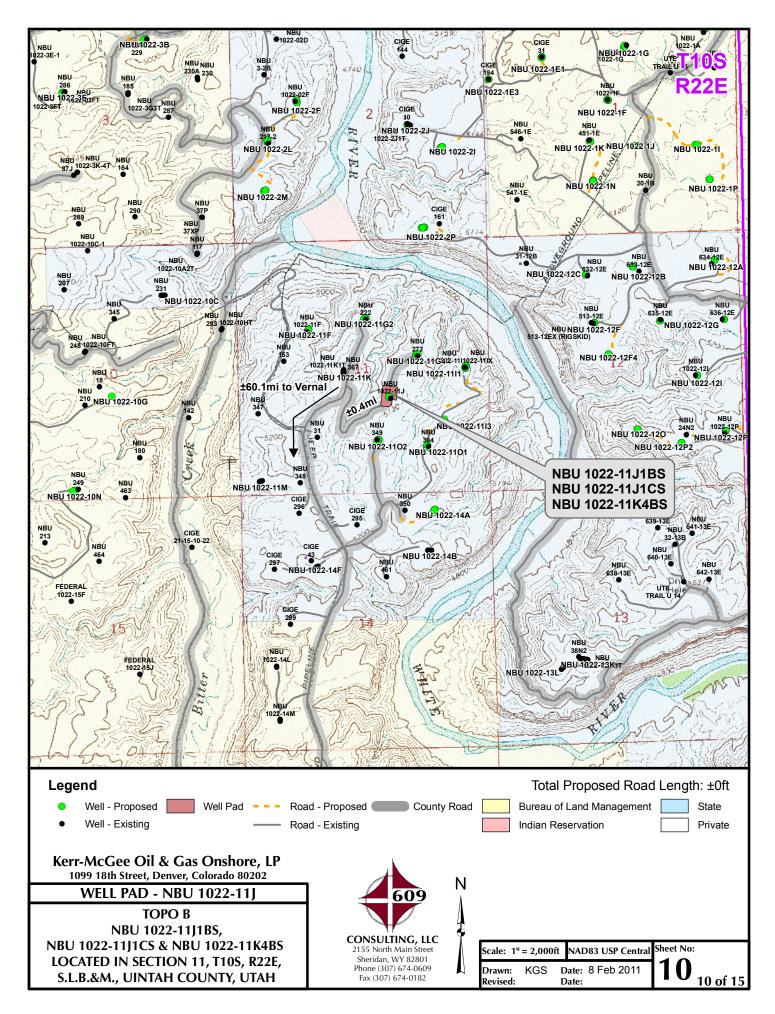
(435) 789-1365

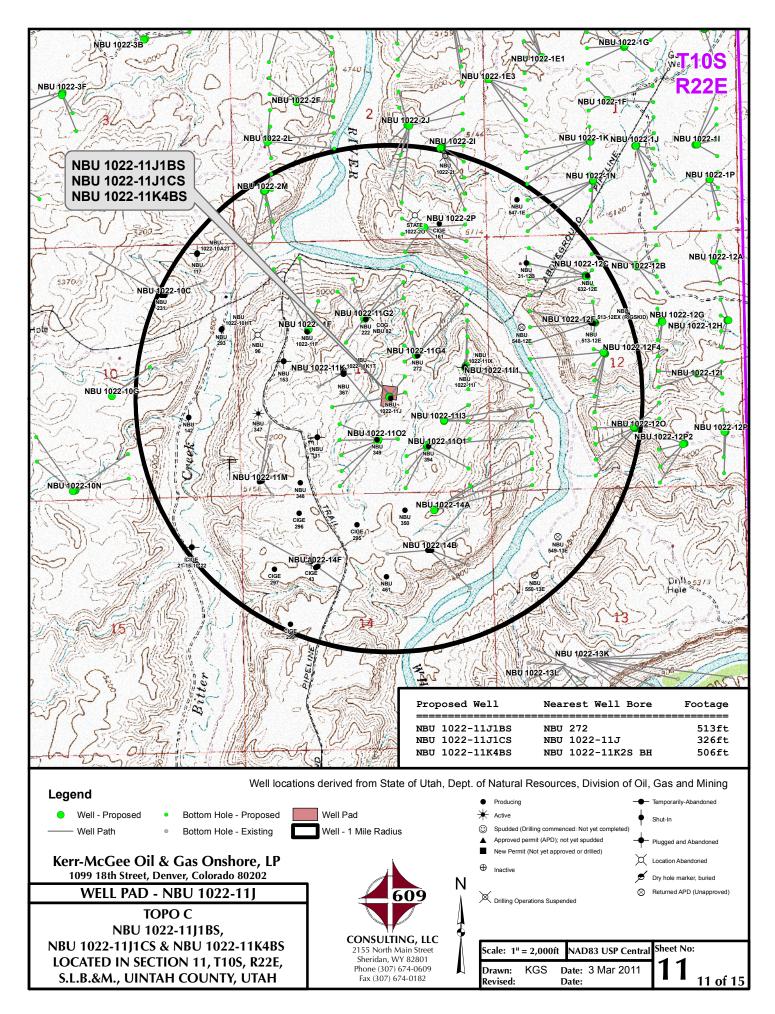
ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078

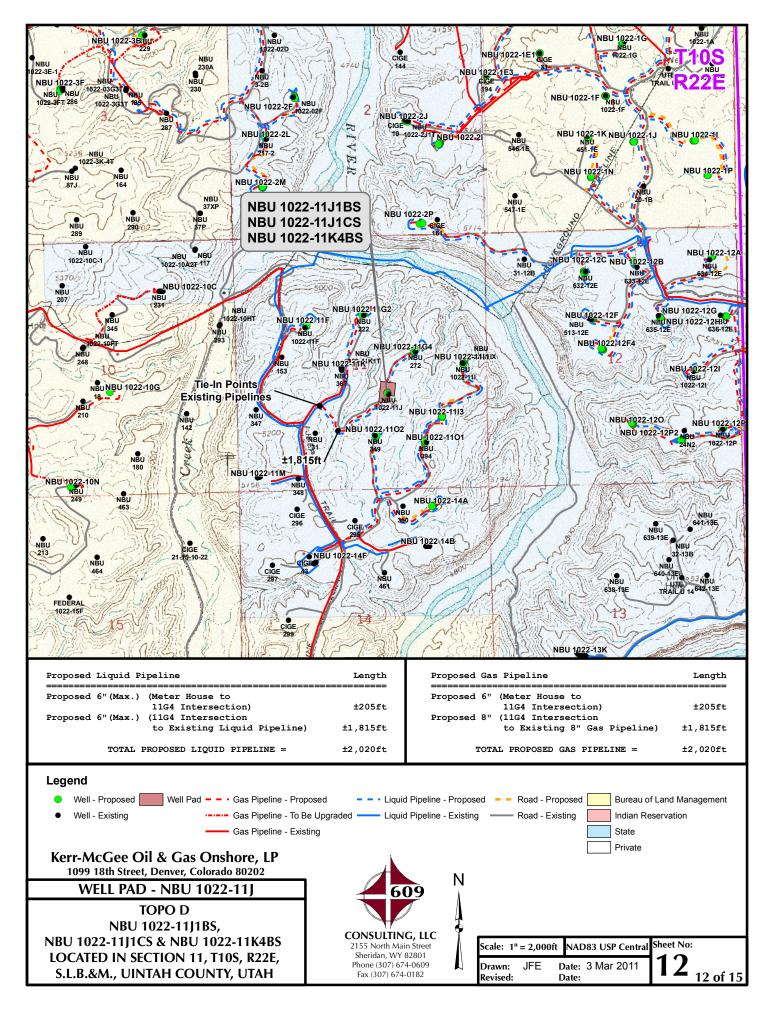
DATE PHOTOS TAKEN: 01-15-11	PHOTOS TAKEN BY: M.S.B.	SHEET NO:
DATE DRAWN: 01-17-11	DRAWN BY: E.M.S.	8

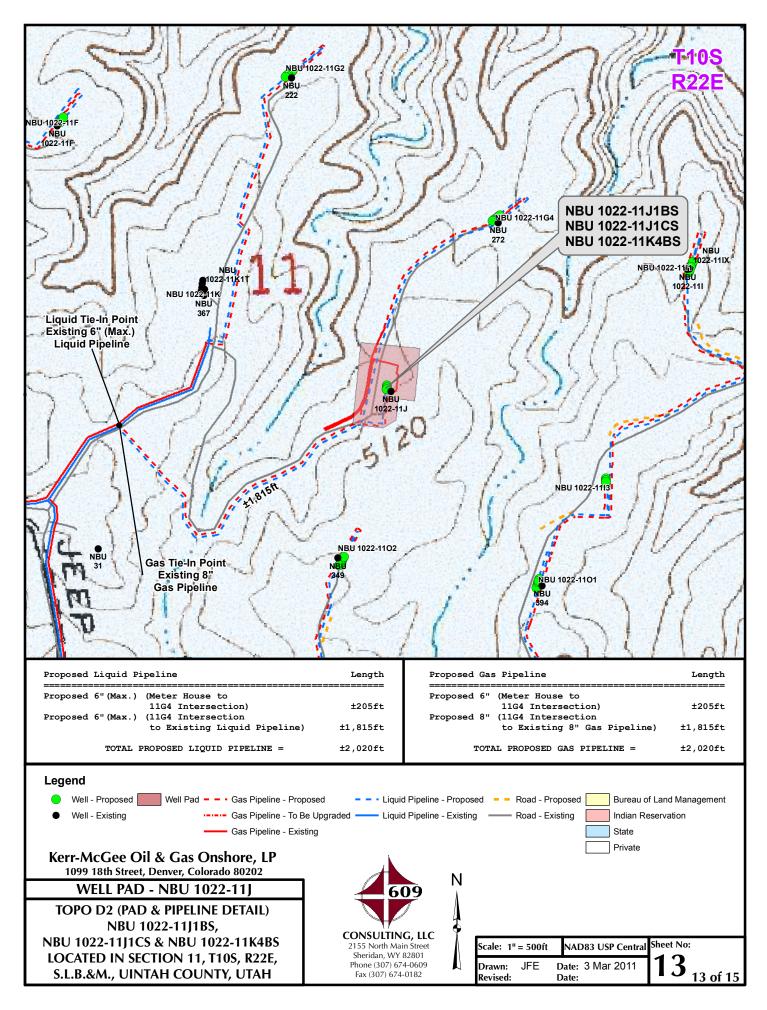
8 OF 15

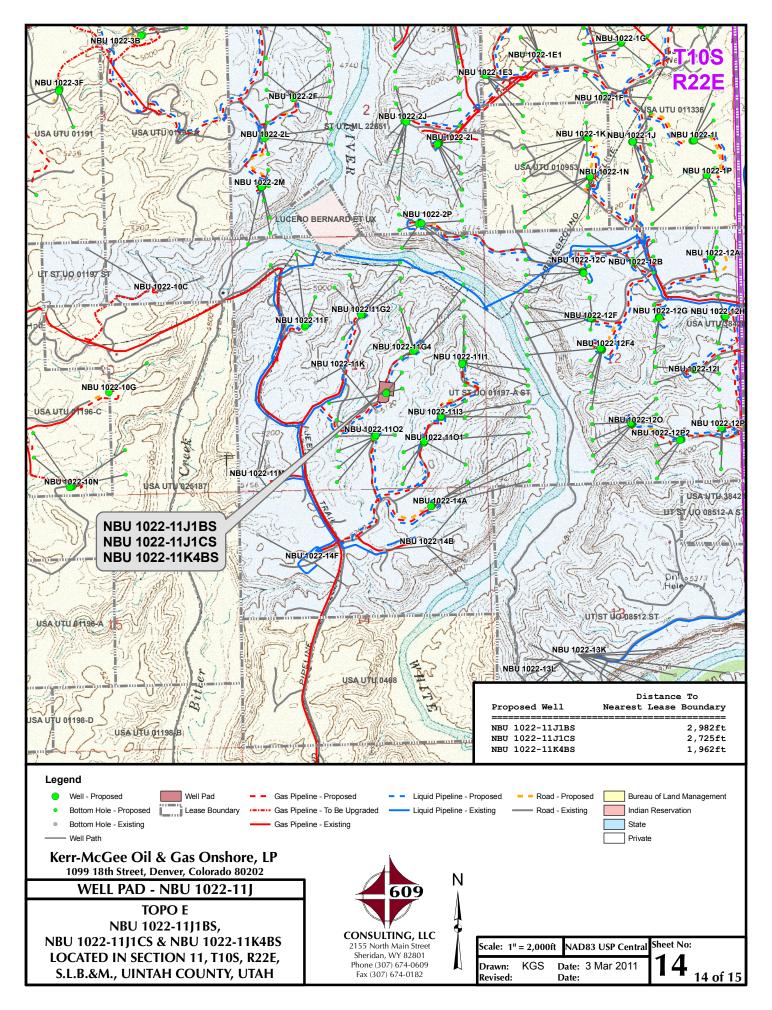












Kerr-McGee Oil & Gas Onshore, LP WELL PAD - NBU 1022-11J WELLS – NBU 1022-11J1BS, NBU 1022-11J1CS & NBU 1022-11K4BS Section 11, T10S, R22E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 23.8 miles to the intersection of the Bitter Creek Road (County B Road 4120). Exit left and proceed in a southeasterly direction along the Bitter Creek Road approximately 8.2 miles to the junction of the Bitter Creek Cut Off Road (County B Road 4140). Exit left and proceed in an easterly direction along the Bitter Creek Cut Off Road approximately 1.5 miles to the junction of the Archy Bench Road (County D Road 4150). Exit left and proceed in a northerly direction along the Archy Bench Road approximately 3.1 miles to a Class D County Road to the south. Exit right and proceed in a southerly, then northeasterly direction along the Class D County Road approximately 0.4 miles to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 60.5 miles in a southerly direction.

SHEET 15 OF 15

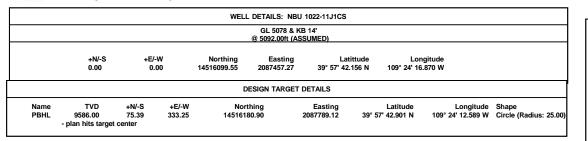
API Well Number: 430475184300@oject: Uintah County, UT UTM12 Scientific Drilling Rocky Mountain Operations

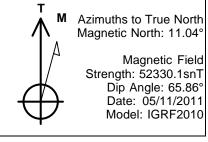
Site: NBU 1022-11J PAD Well: NBU 1022-11J1CS

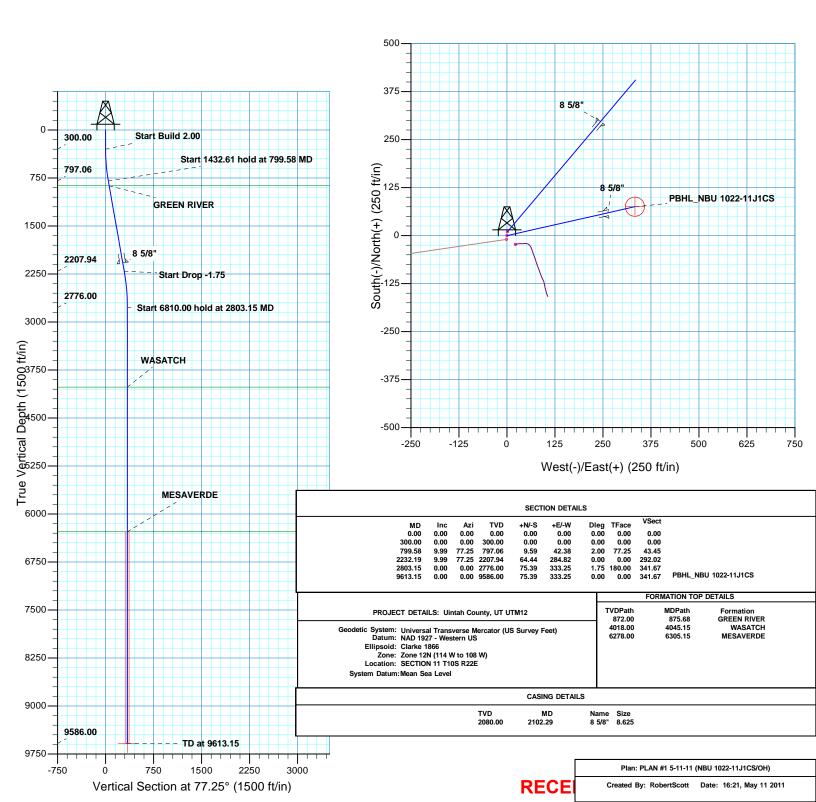
Wellbore: OH

Design: PLAN #1 5-11-11











Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 1022-11J PAD NBU 1022-11J1CS

ОН

Plan: PLAN #1 5-11-11

Standard Planning Report

11 May, 2011



RECEIVED: August 10, 2011



SDI Planning Report



EDM5000-RobertS-Local Database:

Company: Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 Project:

Site: NBU 1022-11J PAD NBU 1022-11J1CS Well:

Wellbore: OH

Design: PLAN #1 5-11-11 Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference:

MD Reference:

North Reference:

Well NBU 1022-11J1CS GL 5078 & KB 14'

@ 5092.00ft (ASSUMED) GL 5078 & KB 14'

@ 5092.00ft (ASSUMED)

Minimum Curvature

Uintah County, UT UTM12 **Project**

Map System: Universal Transverse Mercator (US Survey Feet)

NAD 1927 - Western US Geo Datum: Zone 12N (114 W to 108 W) Map Zone:

System Datum: Mean Sea Level

NBU 1022-11J PAD, SECTION 11 T10S R22E Site

Northing: 14,516,109.41 usft Site Position: Latitude: 39° 57' 42.253 N From: Lat/Long Easting: 2,087,458.22 usft Longitude: 109° 24' 16.855 W 0.00 ft Slot Radius: 13.200 in **Grid Convergence:** 1.02° **Position Uncertainty:**

Well NBU 1022-11J1CS, 1990 FSL 2130 FEL

Well Position -9 83 ft 14.516.099.56 usft 39° 57' 42 156 N +N/-S Northing: Latitude:

+E/-W -1.12 ft Easting: 2,087,457.27 usft Longitude: 109° 24' 16.870 W

Position Uncertainty 0.00 ft Wellhead Elevation: **Ground Level:** 5.078.00 ft

ОН Wellbore Field Strength Magnetics **Model Name** Sample Date Declination **Dip Angle** (°) (°) (nT) IGRF2010 05/11/2011 11.04 65.86 52,330

PLAN #1 5-11-11 Design Audit Notes: PLAN 0.00 Version: Phase: Tie On Depth:

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°)

0.00 0.00 0.00 77.25

Plan Sections Measured Vertical Dogleg Build Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate **TFO** (°/100ft) (°/100ft) (°/100ft) (ft) (°) (°) (ft) (ft) (ft) **Target** (°) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 300.00 0.00 0.00 300.00 0.00 0.00 0.00 0.00 0.00 0.00 799.58 9.99 77.25 797.06 42.38 2.00 2.00 0.00 77.25 9.59 2,232.19 9.99 77.25 2,207.94 64.44 284.82 0.00 0.00 0.00 0.00 2,803.15 0.00 0.00 2,776.00 75.39 333.25 1 75 -1 75 0.00 180.00 9,613.15 0.00 0.00 9,586.00 75.39 333.25 0.00 0.00 0.00 0.00 PBHL_NBU 1022-11J



SDIPlanning Report



Database: EDM5000-RobertS-Local

Company: Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12

 Site:
 NBU 1022-11J PAD

 Well:
 NBU 1022-11J1CS

Wellbore: OH

Design: PLAN #1 5-11-11

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NBU 1022-11J1CS

GL 5078 & KB 14'

@ 5092.00ft (ASSUMED) GL 5078 & KB 14'

@ 5092.00ft (ASSUMED)

Minimum Curvature

ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2									
400.00	2.00	77.25	399.98	0.39	1.70	1.75	2.00	2.00	0.00
500.00	4.00	77.25	499.84	1.54	6.81	6.98	2.00	2.00	0.00
600.00	6.00	77.25	599.45	3.46	15.31	15.69	2.00	2.00	0.00
700.00	8.00	77.25	698.70	6.15	27.19	27.88	2.00	2.00	0.00
799.58	9.99	77.25	797.06	9.59	42.38	43.45	2.00	2.00	0.00
Start 1432.6	1 hold at 799.58	MD							
800.00	9.99	77.25	797.47	9.60	42.45	43.52	0.00	0.00	0.00
875.68	9.99	77.25	872.00	12.50	55.26	56.65	0.00	0.00	0.00
GREEN RIV									
900.00	9.99	77.25	895.95	13.43	59.37	60.87	0.00	0.00	0.00
1,000.00	9.99	77.25	994.43	17.26	76.30	78.22	0.00	0.00	0.00
1,100.00	9.99	77.25	1,092.92	21.09	93.22	95.57	0.00	0.00	0.00
1,200.00	9.99	77.25	1,191.40	24.92	110.14	112.92	0.00	0.00	0.00
1,300.00	9.99	77.25	1,289.88	28.75	127.06	130.28	0.00	0.00	0.00
1,400.00	9.99	77.25	1.388.37	32.58	143.99	147.63	0.00	0.00	0.00
1,500.00	9.99	77.25	1,486.85	36.40	160.91	164.98	0.00	0.00	0.00
1,600.00	9.99	77.25	1,585.33	40.23	177.83	182.33	0.00	0.00	0.00
1,700.00	9.99	77.25	1,683.82	44.06	194.76	199.68	0.00	0.00	0.00
1,800.00	9.99	77.25	1,782.30	47.89	211.68	217.03	0.00	0.00	0.00
1,900.00	9.99	77.25 77.25	1,880.78	51.72 55.55	228.60 245.52	234.38 251.73	0.00 0.00	0.00	0.00
2,000.00 2,100.00	9.99 9.99	77.25 77.25	1,979.26 2,077.75	59.38	262.45	269.08	0.00	0.00 0.00	0.00 0.00
2,102.29	9.99	77.25 77.25	2,077.75	59.46	262.43	269.08	0.00	0.00	0.00
8 5/8"	3.33	11.25	2,000.00	39.40	202.03	209.40	0.00	0.00	0.00
2,200.00	9.99	77.25	2,176.23	63.20	279.37	286.43	0.00	0.00	0.00
2,232.19	9.99	77.25	2,207.94	64.44	284.82	292.02	0.00	0.00	0.00
Start Drop -		77.05	0.074.00	00.00	005.00	000.00	4.75	4.75	0.00
2,300.00	8.81 7.06	77.25 77.25	2,274.83 2,373.87	66.88 69.92	295.62 309.07	303.09 316.88	1.75 1.75	-1.75 -1.75	0.00
2,400.00 2,500.00	7.06 5.31	77.25 77.25	2,373.87	72.30	309.07 319.57	316.88	1.75	-1.75 -1.75	0.00 0.00
2,600.00	3.56	77.25	2,572.98	74.00	327.11	335.37	1.75	-1.75	0.00
2,700.00	1.81	77.25	2,672.87	75.04	331.67	340.05	1.75	-1.75	0.00
2,800.00	0.06	77.25	2,772.85	75.39	333.25	341.67	1.75	-1.75	0.00
2,803.15	0.00	0.00	2,776.00	75.39	333.25	341.67	1.75	-1.75	0.00
	0 hold at 2803.15		0.070.05	75.00	200.05	244.07	0.00	0.00	0.00
2,900.00	0.00	0.00	2,872.85	75.39	333.25	341.67	0.00	0.00	0.00
3,000.00	0.00	0.00	2,972.85	75.39	333.25	341.67	0.00	0.00	0.00
3,100.00	0.00	0.00	3,072.85	75.39	333.25	341.67	0.00	0.00	0.00
3,200.00	0.00	0.00	3,172.85	75.39	333.25	341.67	0.00	0.00	0.00
3,300.00	0.00	0.00	3,272.85	75.39	333.25	341.67	0.00	0.00	0.00
3,400.00	0.00	0.00	3,372.85	75.39	333.25	341.67	0.00	0.00	0.00
3,500.00	0.00	0.00	3,472.85	75.39	333.25	341.67	0.00	0.00	0.00
3,600.00	0.00	0.00	3,572.85	75.39	333.25	341.67	0.00	0.00	0.00
3,700.00	0.00	0.00	3,672.85	75.39	333.25	341.67	0.00	0.00	0.00
3,800.00	0.00	0.00	3,772.85	75.39	333.25	341.67	0.00	0.00	0.00
3,900.00	0.00	0.00	3,872.85	75.39	333.25	341.67	0.00	0.00	0.00



SDIPlanning Report



Database: EDM5000-RobertS-Local

Company: Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12

 Site:
 NBU 1022-11J PAD

 Well:
 NBU 1022-11J1CS

Wellbore: OH

Design: PLAN #1 5-11-11

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NBU 1022-11J1CS

GL 5078 & KB 14'

@ 5092.00ft (ASSUMED) GL 5078 & KB 14' @ 5092.00ft (ASSUMED)

True

Minimum Curvature

ed Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,000.00	0.00	0.00	3,972.85	75.39	333.25	341.67	0.00	0.00	0.00
4,045.15	0.00	0.00	4,018.00	75.39	333.25	341.67	0.00	0.00	0.00
WASATCH									
4,100.00	0.00	0.00	4,072.85	75.39	333.25	341.67	0.00	0.00	0.00
4,200.00	0.00	0.00	4,172.85	75.39	333.25	341.67	0.00	0.00	0.00
4,300.00	0.00	0.00	4,272.85	75.39	333.25	341.67	0.00	0.00	0.00
4,400.00	0.00	0.00	4,372.85	75.39	333.25	341.67	0.00	0.00	0.00
4,500.00	0.00	0.00	4,472.85	75.39	333.25	341.67	0.00	0.00	0.00
4,600.00	0.00	0.00	4,572.85	75.39	333.25	341.67	0.00	0.00	0.00
4,700.00	0.00	0.00	4,672.85 4,772.85	75.39	333.25 333.25	341.67 341.67	0.00	0.00 0.00	0.00
4,800.00	0.00	0.00		75.39			0.00		0.00
4,900.00	0.00	0.00	4,872.85	75.39	333.25	341.67	0.00	0.00	0.00
5,000.00	0.00	0.00	4,972.85	75.39	333.25	341.67	0.00	0.00	0.00
5,100.00	0.00	0.00	5,072.85	75.39	333.25	341.67	0.00	0.00	0.00
5,200.00	0.00	0.00	5,172.85	75.39	333.25	341.67	0.00	0.00 0.00	0.00
5,300.00	0.00	0.00	5,272.85	75.39	333.25	341.67	0.00		0.00
5,400.00	0.00	0.00	5,372.85	75.39	333.25	341.67	0.00	0.00	0.00
5,500.00	0.00	0.00	5,472.85	75.39	333.25	341.67	0.00	0.00	0.00
5,600.00	0.00	0.00	5,572.85	75.39	333.25	341.67	0.00	0.00	0.00
5,700.00	0.00	0.00	5,672.85	75.39	333.25	341.67	0.00	0.00	0.00
5,800.00	0.00	0.00	5,772.85	75.39	333.25	341.67	0.00	0.00	0.00
5,900.00	0.00	0.00	5,872.85	75.39	333.25	341.67	0.00	0.00	0.00
6,000.00	0.00	0.00	5,972.85	75.39	333.25	341.67	0.00	0.00	0.00
6,100.00	0.00	0.00	6,072.85	75.39	333.25	341.67	0.00	0.00	0.00
6,200.00	0.00	0.00	6,172.85	75.39	333.25	341.67	0.00	0.00	0.00
6,300.00	0.00	0.00	6,272.85	75.39	333.25	341.67	0.00	0.00	0.00
6,305.15	0.00	0.00	6,278.00	75.39	333.25	341.67	0.00	0.00	0.00
MESAVERD		0.00	0.070.05	75.00	222.25	0.44.07	0.00	0.00	0.00
6,400.00	0.00	0.00	6,372.85	75.39	333.25	341.67	0.00	0.00	0.00
6,500.00 6,600.00	0.00 0.00	0.00 0.00	6,472.85 6,572.85	75.39 75.39	333.25 333.25	341.67 341.67	0.00 0.00	0.00 0.00	0.00 0.00
6,700.00	0.00	0.00	6,672.85	75.39 75.39	333.25	341.67	0.00	0.00	0.00
6,800.00	0.00	0.00	6,772.85	75.39	333.25	341.67	0.00	0.00	0.00
6,900.00	0.00	0.00	6,872.85	75.39	333.25	341.67	0.00	0.00	0.00
7,000.00	0.00	0.00	6,972.85	75.39	333.25	341.67	0.00	0.00	0.00
7,100.00 7,200.00	0.00 0.00	0.00 0.00	7,072.85 7,172.85	75.39 75.39	333.25 333.25	341.67 341.67	0.00 0.00	0.00 0.00	0.00 0.00
,									
7,300.00	0.00	0.00	7,272.85	75.39	333.25	341.67	0.00	0.00	0.00
7,400.00	0.00	0.00	7,372.85	75.39	333.25	341.67	0.00	0.00	0.00
7,500.00	0.00	0.00	7,472.85	75.39	333.25	341.67	0.00	0.00	0.00
7,600.00	0.00	0.00	7,572.85	75.39	333.25	341.67	0.00	0.00	0.00
7,700.00	0.00	0.00	7,672.85	75.39	333.25	341.67	0.00	0.00	0.00
7,800.00	0.00	0.00	7,772.85	75.39	333.25	341.67	0.00	0.00	0.00
7,900.00	0.00	0.00	7,872.85	75.39	333.25	341.67	0.00	0.00	0.00
8,000.00	0.00	0.00	7,972.85	75.39	333.25	341.67	0.00	0.00	0.00
8,100.00	0.00	0.00	8,072.85	75.39	333.25	341.67	0.00	0.00	0.00
8,200.00	0.00	0.00	8,172.85	75.39	333.25	341.67	0.00	0.00	0.00
8,300.00	0.00	0.00	8,272.85	75.39	333.25	341.67	0.00	0.00	0.00
8,400.00	0.00	0.00	8,372.85	75.39	333.25	341.67	0.00	0.00	0.00
8,500.00	0.00	0.00	8,472.85	75.39	333.25	341.67	0.00	0.00	0.00
8,600.00	0.00	0.00	8,572.85	75.39	333.25	341.67	0.00	0.00	0.00
8,700.00	0.00	0.00	8,672.85	75.39	333.25	341.67	0.00	0.00	0.00



SDIPlanning Report



Database: Company: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site:

NBU 1022-11J PAD

Well: NBU 1022-11J1CS

Wellbore:

Design: PLAN #1 5-11-11

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NBU 1022-11J1CS

GL 5078 & KB 14'

@ 5092.00ft (ASSUMED) GL 5078 & KB 14'

@ 5092.00ft (ASSUMED) True

Minimum Curvature

anned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,800.00	0.00	0.00	8,772.85	75.39	333.25	341.67	0.00	0.00	0.00
8,900.00	0.00	0.00	8,872.85	75.39	333.25	341.67	0.00	0.00	0.00
9,000.00	0.00	0.00	8,972.85	75.39	333.25	341.67	0.00	0.00	0.00
9,100.00	0.00	0.00	9,072.85	75.39	333.25	341.67	0.00	0.00	0.00
9,200.00	0.00	0.00	9,172.85	75.39	333.25	341.67	0.00	0.00	0.00
9,300.00	0.00	0.00	9,272.85	75.39	333.25	341.67	0.00	0.00	0.00
9,400.00	0.00	0.00	9,372.85	75.39	333.25	341.67	0.00	0.00	0.00
9,500.00	0.00	0.00	9,472.85	75.39	333.25	341.67	0.00	0.00	0.00
9,600.00	0.00	0.00	9,572.85	75.39	333.25	341.67	0.00	0.00	0.00
9,613.15	0.00	0.00	9,586.00	75.39	333.25	341.67	0.00	0.00	0.00
PBHL_NBU	1022-11J1CS								

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_NBU 1022-11J1C - plan hits target cent - Circle (radius 25.00		0.00	9,586.00	75.39	333.25	14,516,180.90	2,087,789.12	39° 57' 42.901 N	109° 24' 12.589 W

Casing Points							
	Measured	Vertical			Casing	Hole	
	Depth	Depth			Diameter	Diameter	
	(ft)	(ft)		Name	(in)	(in)	
	2,102.29	2,080.00	8 5/8"		8.625	11.000	

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	875.68	872.00	GREEN RIVER				
	4,045.15	4,018.00	WASATCH				
	6,305.15	6,278.00	MESAVERDE				

Plan Annotations				
Measured	Vertical	Local Coord	dinates	
Depth	Depth	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	Comment
300.00	300.00	0.00	0.00	Start Build 2.00
799.58	3 797.06	9.59	42.38	Start 1432.61 hold at 799.58 MD
2,232.19	2,207.94	64.44	284.82	Start Drop -1.75
2,803.15	2,776.00	75.39	333.25	Start 6810.00 hold at 2803.15 MD
9,613.15	9,586.00	75.39	333.25	TD at 9613.15

	NBU 1022-11J1BS		
Surface:	2000 FSL / 2129 FEL	NWSE	Lot
BHL:	2395 FSL / 1798 FEL	NWSE	Lot
	NBU 1022-11J1CS		
Surface:	1990 FSL / 2130 FEL	NWSE	Lot
BHL:	2065 FSL / 1797 FEL	NWSE	Lot
	NBU 1022-11K4BS		
Surface:	1980 FSL / 2131 FEL	NWSE	Lot
BHL:	1804 FSL / 1963 FWL	NESW	Lot

Pad: 1022-11J PAD Section 11 T10S R22E Mineral Lease: UO1197A-ST

Uintah County, Utah Operator: Kerr-McGee Oil & Gas Onshore LP

This SUPO contains surface operating procedures for Kerr-McGee Oil & Gas Onshore LP (KMG), a wholly owned subsidiary of Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to APC/KMG (including but not limited to, APDs/SULAs/ROEs/ROWs and/or easements.)

See associated Utah Division of Oil, Gas, and Mining (UDOGM) Form 3(s), plats, maps, and other attachments for site-specific information on projects represented herein.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

A. Existing Roads:

Existing roads consist of county and improved/unimproved lease roads. KMG will maintain existing roads in a condition that is the same as or better than before operations began and in a safe and usable condition. Maintenance of existing roads will continue until final abandonment and reclamation of well pads and/or other facilities. The road maintenance may include, but is not limited to, blading, ditching, culvert installation/cleanout, surfacing, and dust control.

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each other to the maximum extent possible; in no case will the maximum disturbance width of the access road and utility corridors exceed 50', unless otherwise approved.

B. Planned Access Roads:

No new access road is proposed. (see Topo Map B). Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

If there are roads that are new or to be reconstructed, they will be located, designed, and maintained to meet the standards of SITLA and other commonly accepted Best Management Practices (BMPs). If a new road/corridor were to cross a water of the United States, KMG will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers.

During the onsite, turnouts, major cut and fills, culverts, bridges, gates, cattle guards, low water crossings, or modifications needed to existing infrastructure/facilities were determined, as applicable, are typically shown on attached Exhibits and Topo maps.

C. Location of Existing and Proposed Facilities:

This pad will expand the existing pad for the NBU 1022-11J. The NBU 1022-11J well location is a vertical producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of August 5, 2011.

Production facilities (see Well Pad Design Summary and Facilities Diagram):

Production facilities will be installed on the disturbed portion of the well pad and may include bermed components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will be constructed of compacted subsoil or corrugated metal, impervious, designed to hold 110% of the capacity of the largest tank, and be independent of the back cut. All permanent (on-site six months or longer) above ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with SITLA.

Gathering Facilities:

The following pipeline transmission facilities will apply if the well is productive (see Topo D):

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is $\pm 2,020$ ' and the individual segments are broken up as follows:

±205' (0.04 miles) –New 6" buried gas pipeline from the meter to the tie-in at the proposed NBU 1022-11G4 Intersection. Please refer to Topo D2 - Pad and Pipeline Detail.

±1,815' (0.34 miles) –New 8" buried gas pipeline from the tie-in at the proposed NBU 1022-11G4 Intersection SW to the tie-in at the existing 8" gas pipeline. Please refer to Topo D2 - Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 2,020$ ' and the individual segments are broken up as follows:

±205' (0.04 miles) –New 6" (max) buried liquid pipeline from the separator to the tie-in at the proposed NBU 1022-11G4 Intersection. Please refer to Topo D2 - Pad and Pipeline Detail.

±1,815' (0.34 miles) –New 6" (max) buried liquid pipeline from the tie-in at the proposed NBU 1022-11G4 Intersection SW to the tie-in at the existing 6" liquid pipeline.

Please refer to Topo D2 - Pad and Pipeline Detail.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

The proposed pipelines will be buried and will include gas gathering and liquid gathering pipelines in the same trench. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. KMG requests a permanent 30' right-of-way adjacent to the road for life-of-project for maintenance, repairs, and/or upgrades, no additional right-of-way will be needed beyond the 30'. Where the pipeline is not adjacent to the road or well pad, KMG requests a temporary 45' construction right-of-way 30' permanent right-of-way.

The proposed trench width for the pipeline would range from 18-48 inches and will be excavated to a depth of 48 to 60 inches of normal soil cover or 24 inches of cover in consolidated rock. During construction blasting may occur along the proposed right-of-way where trenching equipment cannot cut into the bedrock. Large debris and rocks removed from the earth during trenching and blasting that could not be returned to the trench would be distributed evenly and naturally in the project area. The proposed pipelines will be pressure tested pneumatically (depending on size) or with fluids (either fresh or produced). If fluids are used, there will be no discharge to the surface.

Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity and ownership, as well as to provide emergency contact phone numbers. Above ground valves, T's, and/or cathodic protection will be installed at various locations for connection, corrosion prevention and/or for safety purposes.

D. Location and Type of Water Supply:

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

E. Source of Construction Materials:

Construction operations will typically be completed with native materials found on location. If needed, construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source and described in subsequent Sundry requests. No construction materials will be removed from State lands without prior approval from SITLA.

F. Methods for Handling Waste Materials:

Should the well be productive, produced water will be contained in a water tank and will be transported by pipeline and/or truck to an approved disposal sites facilities and/or Salt Water Disposal (SWD) injection well. Currently, those facilities are:

RNI in Sec. 5 T9S R22E Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Ouray #1 SWD in Sec. 1 T9S R21E NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E NBU 921-33F SWD in Sec. 33 T9S R21E NBU 921-34L SWD in Sec. 34 T9S R21E

Drill cuttings and/or fluids will be contained in the reserve/frac pit. Cuttings will be buried in pit(s) upon closure. Unless otherwise approved, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface runoff. Should fluid hydrocarbons be encountered during drilling, completions or well testing, product will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by SITLA. Should timely removal prove infeasible, the pit will be netted with mesh no larger than 1 inch until such time as hydrocarbons can be removed. Hydrocarbon removal will also take place prior to the closure of the pit, unless authorization is provided for disposal via alternative pit closure methods (e.g. solidification.)

The reserve and/or fracture stimulation pit will be lined with a synthetic material 20 mil or thicker, The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. Any additional pits necessary for subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

For the protection of livestock and wildlife, all open pits and cellars will be fenced/covered to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after after six (6) months from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Additional drying methods may include fly-ash solidification or sprinkler evaporation. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift. Reserve pit liners will be cut off or folded as near to the mud surface as possible and as safety considerations allow and buried on location.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Any undesirable event, including accidental release of fluids, or release in excess of reportable quantities, will be managed according to the notification requirements of UDOGMs "Reporting Oil and Gas Undesirable Events" rule. Where State wells are participatory to a Federal agreement, according to NTL-3A, the appropriate Federal agencies will be notified.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

G. Ancillary Facilities:

None are anticipated.

H. Well Site Layout (see Well Pad Design Summary):

The location, orientation and aerial extent of each drill pad; reserve/completion/flare pit; access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded.

Coordinates are provided in the National Spatial Reference System, North American Datum, 1927 (NAD27) or latest edition. Distances are depicted on each plat to the nearest two adjacent section lines.

I. Plans for Reclamation of the Surface:

Surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. This reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but is not limited to the re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation includes pit closure, re-contouring (where possible), soil bed preparation, topsoil placement, seeding, and/or weed control.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit.

Final Reclamation

Final reclamation will be performed for newly drilled unproductive wells and/or at the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by KMG. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring, final grading will be conducted over the entire surface of the well site and access road. Where practical, the area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers and surface materials will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep perpendicular to the natural flow of water.

All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to UDOGM.

Seeding and Measures Common to Interim and Final Reclamation

Reclaimed areas may be fenced to exclude grazing and encourage re-vegetation.

On slopes where severe erosion can become a problem and the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. The slope will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to, erosion control blankets and bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

Seeding will occur year-round as conditions allow. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The site specific seed mix will be provided by SITLA.

J. Surface/Mineral Ownership:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

L. Other Information:

None

M. Lessee's or Operators' Representative & Certification:

Andy Lytle Regulatory Analyst I Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6100 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage for State lease activities is provided by State Surety Bond 22013542, and for applicable Federal lease activities and pursuant to 43 CFR 3104, by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

1 1 80	August 5, 2011
Andy Lytle	Date



JOSEPH D. JOHNSON LANDMAN Joseph D. Johnson 1099 18TH STREET STE. 1800 • DENVER, CO 80202 720-929-6708 • FAX 720-929-7708 E-MAIL: JOE.JOHNSON@ANADARKO.COM

August 5, 2011

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11

NBU 1022-11J1CS

T10S-R22E

Section 11: NWSE

Surface: 1990' FSL, 2130' FEL

T10S-R22E Section 11: NWSE

Bottom Hole: 2065' FSL, 1797' FEL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-11J1CS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Joseph D. Johnson Landman

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

August 19, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 1022-11F PAD

43-047-51797 NBU 1022-11C2CS Sec 11 T10S R22E 1860 FNL 1499 FWL BHL Sec 11 T10S R22E 0370 FNL 1365 FWL 43-047-51799 NBU 1022-11C3DS Sec 11 T10S R22E 1852 FNL 1505 FWL BHL Sec 11 T10S R22E 1268 FNL 1726 FWL 43-047-51800 NBU 1022-11D1CS Sec 11 T10S R22E 1868 FNL 1493 FWL BHL Sec 11 T10S R22E 0576 FNL 0818 FWL 43-047-51801 NBU 1022-11F2DS Sec 11 T10S R22E 1844 FNL 1512 FWL BHL Sec 11 T10S R22E 1622 FNL 1625 FWL **NBU 1022-11G2 PAD** 43-047-51802 NBU 1022-11B4CS Sec 11 T10S R22E 1627 FNL 2594 FEL BHL Sec 11 T10S R22E 1238 FNL 1803 FEL 43-047-51813 NBU 1022-11B4BS Sec 11 T10S R22E 1633 FNL 2601 FEL BHL Sec 11 T10S R22E 0908 FNL 1804 FEL 43-047-51815 NBU 1022-11B1CS Sec 11 T10S R22E 1639 FNL 2609 FEL BHL Sec 11 T10S R22E 0577 FNL 1805 FEL 43-047-51817 NBU 1022-C4AS Sec 11 T10S R22E 1645 FNL 2617 FEL BHL Sec 11 T10S R22E 0825 FNL 2462 FWL 43-047-51818 NBU 1022-11C4CS Sec 11 T10S R22E 1651 FNL 2625 FEL BHL Sec 11 T10S R22E 1071 FNL 2131 FWL

API #	WE	LL NAME		LOCATION						
(Proposed PZ	WASA	ATCH-MESA VERDI	Ξ)							
43-047-51855	NBU	1022-11F4AS BHL							2633 2288	
NBU 1022-2A PAE 43-047-51803		1022-2G1CS BHL							0760 1814	
43-047-51807	NBU	1022-2G1BS BHL							0770 1815	
43-047-51808	NBU	1022-2H1BS BHL							0730 0494	
43-047-51812	NBU	1022-2H1CS BHL							0740 0494	
		1022-2H4BS BHL							0750 0493	
NBU 1022-11G4 P 43-047-51805		1022-11A4CS BHL							1535 0490	
43-047-51814	NBU	1022-11H1BS BHL							1526 0490	
43-047-51822	NBU	1022-11G4CS BHL							1566 1799	
43-047-51823	NBU	1022-11G1BS BHL							1550 1802	
43-047-51837	NBU	1022-11G1CS BHL							1542 1646	
	NBU	1022-11G4BS BHL							1558 1800	
NBU 1022-2I PAD 43-047-51809	NBU	1022-2I4CS BHL							0949 0492	
43-047-51810	NBU	1022-2P1BS BHL							0957 0492	
43-047-51824	NBU	1022-2I1CS BHL							0931 0493	
43-047-51829	NBU	1022-2I4BS BHL							0940 0492	
43-047-51838	NBU	1022-2P4BS BHL							0975 0492	
		1022-2P1CS BHL							0966 0492	
NBU 1022-2B PAE 43-047-51811		1022-2B1CS BHL							1813 1818	

API #	WE:		LO	CATIO	N			
(Proposed PZ	WASA	ATCH-MESA VERD	Ξ)					
43-047-51827	NBU	1022-2B4CS BHL			R22E R22E			
43-047-51828	NBU	1022-2B4BS BHL			R22E R22E			
		1022-2C1BS BHL						
NBU 1022-11J PA 43-047-51816		1022-11K4BS BHL			R22E R22E			
43-047-51843	NBU	1022-11J1CS BHL			R22E R22E			
43-047-51851 NBU 1022-2J PAE		1022-11J1BS BHL			R22E R22E			
		1022-2G4CS BHL			R22E R22E		_	
43-047-51820	NBU	1022-2H4CS BHL			R22E R22E			
43-047-51844	NBU	1022-2J4BS BHL			R22E R22E			
43-047-51845	NBU	1022-201CS BHL			R22E R22E			
43-047-51847	NBU	1022-2I1BS BHL			R22E R22E		_	
		1022-2G4BS BHL			R22E R22E			
NBU 1022-01 PAI 43-047-51821		1022-1101CS BHL			R22E R22E			
43-047-51831	NBU	1022-1104CS BHL			R22E R22E			
43-047-51832	NBU	1022-11P1BS BHL			R22E R22E			
43-047-51833	NBU	1022-11P4BS BHL			R22E R22E		_	
43-047-51836	NBU	1022-12M1BS BHL			R22E R22E			
43-047-51856	NBU	1022-1104BS BHL			R22E R22E			

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 1022-1111 PA 43-047-51834		1022-11I1CS	Sec	11	T10S	R22E	2545	FSL	0532	FEL
		BHL	Sec	11	T10S	R22E	2112	FSL	0481	FEL
43-047-51835	NBU	1022-12L1CS BHL							0528 L 823	
43-047-51857	NBU							_	0518 0489	
43-047-51858	NBU	1022-11H4CS BHL							0514 0489	
43-047-51861	NBU	1022-12L1BS BHL						_	0525 0822	
43-047-51863	NBU	1022-11H1CS BHL						_	0521 0490	
NBU 1022-2P PAE 43-047-51839	_	1022-2P4CS BHL						_	1342 0496	
43-047-51841	NBU							_	1382 1755	
43-047-51842	NBU							_	1352 0473	
43-047-51846	NBU	1022-204CS BHL						_	1402 1804	
43-047-51848	NBU	1022-11A4BS BHL						_	1372 0490	
43-047-51849	NBU	1022-204BS BHL						_	1392 1807	
43-047-51850									1362 0491	
NBU 1022-14A PA 43-047-51840		1022-11P4CS BHL							1228 0466	
43-047-51860	NBU	1022-12M1CS BHL							1236 0825	
43-047-51868	NBU	1022-12M4BS BHL							1244 0825	
		1022-12M4CS BHL							1252 0819	
NBU 1022-1102 P 43-047-51859		1022-11K4CS BHL							2372 2113	

Page 5

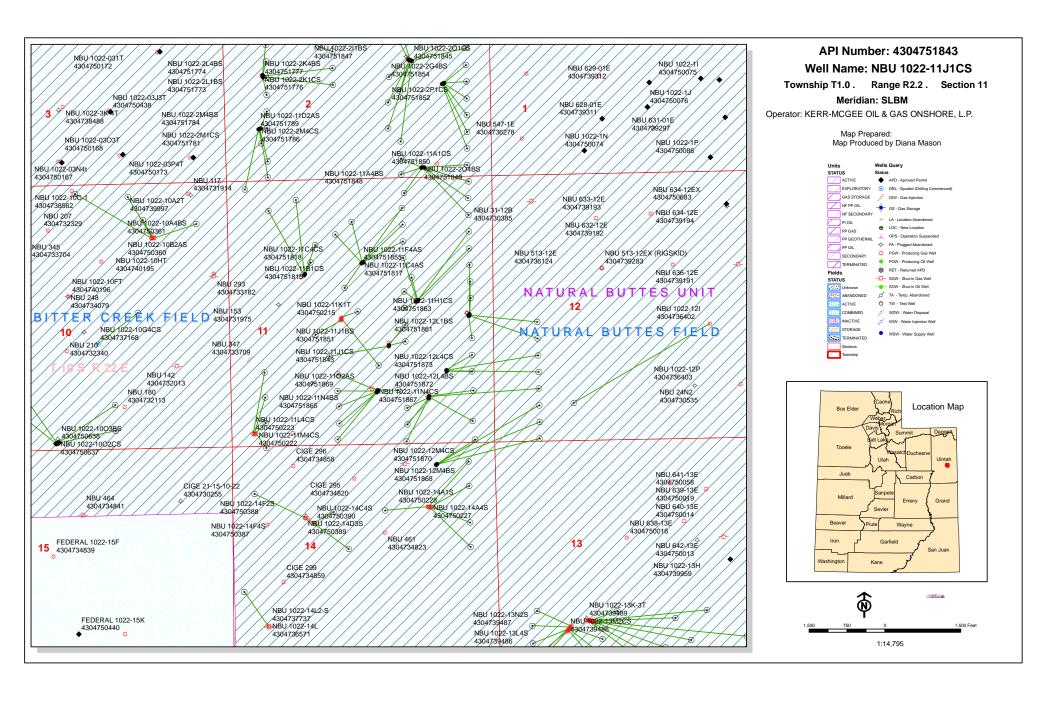
API # WELL NAME LOCATION (Proposed PZ WASATCH-MESA VERDE) 43-047-51862 NBU 1022-11N1BS Sec 11 T10S R22E 1094 FSL 2377 FEL BHL Sec 11 T10S R22E 1111 FSL 2105 FWL 43-047-51864 NBU 1022-11N1CS Sec 11 T10S R22E 1085 FSL 2382 FEL BHL Sec 11 T10S R22E 0801 FSL 2127 FWL 43-047-51865 NBU 1022-11N4BS Sec 11 T10S R22E 1077 FSL 2387 FEL BHL Sec 11 T10S R22E 0462 FSL 2127 FWL 43-047-51867 NBU 1022-11N4CS Sec 11 T10S R22E 1068 FSL 2392 FEL BHL Sec 11 T10S R22E 0146 FSL 2084 FWL 43-047-51869 NBU 1022-1102AS Sec 11 T10S R22E 1111 FSL 2367 FEL BHL Sec 11 T10S R22E 1102 FSL 1964 FEL **NBU 1022-11I3 PAD** 43-047-51866 NBU 1022-11I4BS Sec 11 T10S R22E 1489 FSL 0996 FEL BHL Sec 11 T10S R22E 1774 FSL 0485 FEL 43-047-51871 NBU 1022-1114CS Sec 11 T10S R22E 1459 FSL 0997 FEL BHL Sec 11 T10S R22E 1443 FSL 0497 FEL 43-047-51872 NBU 1022-12L4BS Sec 11 T10S R22E 1479 FSL 0996 FEL BHL Sec 12 T10S R22E 1739 FSL 0823 FWL 43-047-51873 NBU 1022-12L4CS Sec 11 T10S R22E 1469 FSL 0996 FEL BHL Sec 12 T10S R22E 1408 FSL 0824 FWL This office has no objection to permitting the wells at this

time.



bcc: File - Natural Buttes Unit Division of Oil Gas and Mining Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:8-19-11

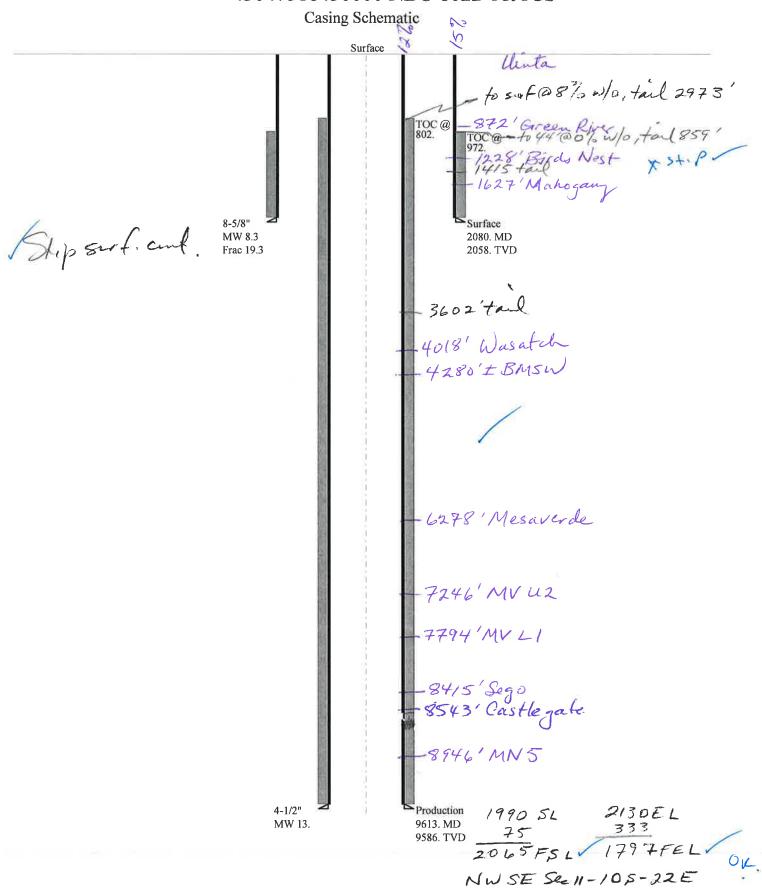


BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 1022-11J1CS 43047518430000

Two way							_		I
Well Name		KERR-MCGE	E OIL	_ & GAS C	NSI	HORE, L.P. NI	BU	1022-11J1C	
String		Surf	Pro	od	Ц		11.		
Casing Size(")		8.625	4.5	500					
Setting Depth (TVD)		2058	95	86					
Previous Shoe Setting Dept	th (TVD)	40	20	58					
Max Mud Weight (ppg)		8.3	13	3.0					
BOPE Proposed (psi)		500	50	000			Ī		
Casing Internal Yield (psi)		3390	10	1690	Ī	i	Ī		
Operators Max Anticipate	d Pressure (psi)	6327	12	2.7	Ī				
Calculations	Sur	f String				8.62	25	**	
Max BHP (psi)		.052*Setti	ing D	Depth*M	W=	888	_		
								BOPE Ade	equate For Drilling And Setting Casing at Depth
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Sett	ing Dept	h)=	641		NO	air drill
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Sett	ing Dept	h)=	435	1	YES	ОК
								*Can Full	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previou	us Sł	hoe Dept	h)=	444	_	NO	Reasonable depth in area
Required Casing/BOPE Te	est Pressure=					2058	ī	psi	
*Max Pressure Allowed @	Previous Casing Shoe=					40	₹	psi *Ass	umes 1psi/ft frac gradient
							=		
Calculations	Proc	d String				4.50)0	"	
Max BHP (psi)		.052*Setti	ing D	Depth*M	W=	6480	╝		
								BOPE Ade	equate For Drilling And Setting Casing at Depth
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Sett	ing Dept	:h)=	5330	╝	NO	
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Setti	ing Dept	h)=	4371		YES	OK
								*Can Full	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previou	us Sł	hoe Dept	h)=	4824	╛	NO	Reasonable
Required Casing/BOPE Te	est Pressure=					5000		psi	
*Max Pressure Allowed @	Previous Casing Shoe=					2058		psi *Ass	umes 1psi/ft frac gradient
Calculations	S	tring						**	
Max BHP (psi)		.052*Setti	ing D	Depth*M	W=		╗		
						ļ <u>'</u>	=	BOPE Ade	equate For Drilling And Setting Casing at Depth
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Setti	ing Dept	h)=		ī	NO	
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Sett	ing Dept	h)=		i	NO	
							=	*Can Full	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previou	us Sł	hoe Dept	h)=		7	NO	
Required Casing/BOPE Te	est Pressure=						Ŧ	psi	
*Max Pressure Allowed @	Previous Casing Shoe=							psi *Ass	umes 1psi/ft frac gradient
Calculations	S	tring						"	
Max BHP (psi)		.052*Setti	ing D	Depth*M	W=		=		
			-		_	1	=	BOPE Ade	equate For Drilling And Setting Casing at Depth
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Sett	ing Dept	h)=		╗	NO	
MASP (Gas/Mud) (psi)		x BHP-(0.22*			_	1	Ħ	NO	
(· 2) (F)		(**3		-r·	_	<u> </u>	4		Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previou	us Sl	hoe Dept	h)=		=	NO	1
		1 3.300		-17	_	<u> </u>	╣	psi	
Required Casing/BOPE Test Pressure=				<u> </u>	Ш	ha.			

*Max Pressure Allowed @ Previous Casing Shoe= psi *Assumes 1psi/ft frac gradient

43047518430000 NBU 1022-11J1CS



43047518430000 NBU 1022-11J1CS Well name:

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type: Surface Project ID: 43-047-51843

Location: **UINTAH** COUNTY

Design parameters: Minimum design factors: **Environment:** H2S considered? Collapse Collapse: No 74 °F Mud weight: 8.330 ppg Surface temperature: Design factor 1.125 Design is based on evacuated pipe. Bottom hole temperature: 103 °F Temperature gradient: 1.40 °F/100ft Minimum section length: 100 ft Burst: Design factor 1.00 Cement top: 972 ft Burst Max anticipated surface pressure: 1,830 psi Internal gradient: 0.120 psi/ft Tension: Directional Info - Build & Drop Calculated BHP 2,077 psi 8 Round STC: 1.80 (J) Kick-off point 300 ft 8 Round LTC: 1.70 (J) Departure at shoe: 266 ft 1.60 (J) Maximum dogleg: No backup mud specified. **Buttress:** 2 °/100ft Premium: 1.50 (J) Inclination at shoe: 9.99° Body yield: 1.50 (B) Re subsequent strings: Next setting depth: 9,586 ft Tension is based on air weight. Next mud weight: 13.000 ppg Neutral point: Next setting BHP: 6,474 psi 1,823 ft Fracture mud wt: 19.250 ppg

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2080	8.625	28.00	I-55	LT&C	2058	2080	7.892	82368
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	891	1880	2.111	2077	3390	1.63	57.6	348	6.04 J

Helen Sadik-Macdonald Prepared Div of Oil, Gas & Mining by:

Phone: 801 538-5357 FAX: 801-359-3940

Date: October 14,2011 Salt Lake City, Utah

2,080 ft

2,080 psi

Fracture depth: Injection pressure:

Collapse is based on a vertical depth of 2058 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43047518430000 NBU 1022-11J1CS

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type:

Production

Project ID:

Location:

UINTAH COUNTY

43-047-51843

Design parameters: Collapse		Minimum design Collapse:	factors:	Environment: H2S considered?	No
Mud weight: Design is based on evacu	13.000 ppg lated pipe.	Design factor	1.125	Surface temperature: Bottom hole temperature: Temperature gradient: Minimum section length:	74 °F 208 °F 1.40 °F/100ft 100 ft
		Burst:		<u> </u>	
		Design factor	1.00	Cement top:	802 ft
Burst		3			
Max anticipated surface					
pressure:	4,365 psi				
Internal gradient:	0.220 psi/ft	Tension:		Directional Info - Build &	Drop
Calculated BHP	6,474 psi	8 Round STC:	1.80 (J)	Kick-off point	300 ft
	-, p	8 Round LTC:	1.80 (J)	Departure at shoe:	342 ft
No backup mud specified		Buttress:	1.60 (J)	Maximum dogleg:	2 °/100ft
, to business made opening		Premium:	1.50 (J)	Inclination at shoe:	0 °
		Body yield:	1.60 (B)		·
	Tension is based on	air weight.			

Neutral point:

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	9613	4.5	11.60	HCP-110	LT&C	9586	9613	3.875	46315
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	6474	8650	1.336	6474	10690	1.65	111.2	279	2.51 J

7,750 ft

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940 Date: October 14,2011 Salt Lake City, Utah

by:

Remarks:

Collapse is based on a vertical depth of 9586 ft, a mud weight of 13 ppg. The casing is considered to be evacuated for collapse purposes.

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.

Well Name NBU 1022-11J1CS

API Number 43047518430000 APD No 4383 Field/Unit NATURAL BUTTES

Location: 1/4,1/4 NWSE **Sec** 11 **Tw** 10.0S **Rng** 22.0E 1990 FSL 2130 FEL

GPS Coord (UTM) 636259 4424516 Surface Owner

Participants

Andy Lytle, Sheila Wopsock, Charles Chase, Grizz Oleen, Mark Kuehn, Doyle Holmes, (Kerr McGee). John Slaugh, Mitch Batty, (Timberline). Jim Davis (SITLA). David Hackford, (DOGM).

Regional/Local Setting & Topography

The general area is in the southeast portion of the Natural Buttes Unit on the northeast end of a major drainage divide called Archy Bench.. Within this area is the White River and rugged drainages that drain into it. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from \(\frac{1}{2} \) mile to 2 miles. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 41 air miles to the northwest. Access from Vernal is approximately 60.5 road miles following Utah State, Uintah County and oilfield development roads. Two wells, in addition to this one will be directionally drilled from this pad. (For a total of three new wells). There is one existing well on this pad. (The NBU 1022-11J). At this time, the decision rather to PA or TA this well has not been made. This proposed location takes in an existing location, and very little new construction will be necessary except for digging the reserve pit. The existing access road will be adequate and will be used. The location runs in a northeast-southwest direction along the top of a flat topped ridge. This ridge breaks off sharply into rugged secondary canyons on the north, west and east sides. New construction will consist of approx. 50 feet on all sides of the existing pad, and an additional 50 feet on the east side for reserve pit and excess cut stockpile. No drainage concerns exist, and no diversions will be needed. The pad as modified should be stable and should be a suitable location for four wells, and is on the best site available in the immediate area.

Surface Use Plan

Current Surface Use

Wildlfe Habitat Existing Well Pad

New Road Miles Well Pad Src Const Material Surface Formation

0 Width 307 Length 410 Onsite UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

10/27/2011 Page 1

Prickly pear, wild onion, shadscale, mat saltbrush, Indian ricegrass, halogeton, pepper grass, annuals and curly Vegetation is a salt desert shrub type. Principal species present are cheatgrass, black sagebrush, stipa, mesquite grass.

Sheep, antelope, raptors and small mammals and birds.

Soil Type and Characteristics

Shallow rocky sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Y Paleo Potental Observed? N Cultural Survey Run? Y Cultural Resources? N

Reserve Pit

Site-Specific Factors	Site Ranking				
Distance to Groundwater (feet)	100 to 200	5			
Distance to Surface Water (feet)	>1000	0			
Dist. Nearest Municipal Well (ft)	>5280	0			
Distance to Other Wells (feet)		20			
Native Soil Type	Mod permeability	10			
Fluid Type	Fresh Water	5			
Drill Cuttings	Normal Rock	0			
Annual Precipitation (inches)		0			
Affected Populations					
Presence Nearby Utility Conduits	Not Present	0			
	Final Score	40	1 Sensitivity Level		

Characteristics / Requirements

The reserve pit is planned in an area of cut on the east side of the location. Dimensions are 90' x 245' x 12' deep with 2' of freeboard. Kerr McGee agreed to line the pit with a 30-mil liner and 2 layers of felt.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 30 Pit Underlayment Required? Y

Other Observations / Comments

Evaluator	Date / Time
David Hackford	8/18/2011

10/27/2011 Page 2

Application for Permit to Drill Statement of Basis

10/27/2011 Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
4383	43047518430000	SITLA	GW	S	No
Operator	KERR-MCGEE OIL & GAS	ONSHORE, L.P.	Surface Owner-APD		
Well Name	NBU 1022-11J1CS		Unit	NATURAL	BUTTES
Field	NATURAL BUTTES		Type of Work	DRILL	
Location	NWSE 11 10S 22E S	1990 FSL 2130 I	FEL GPS Coord (UTM)	636194E	4424713N

Geologic Statement of Basis

Kerr McGee proposes to set 2,080' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,280'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 11. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill 9/21/2011 **APD Evaluator Date / Time**

Surface Statement of Basis

The general area is in the southeast portion of the Natural Buttes Unit on the northeast end of a major drainage divide called Archy Bench. Within this area is the White River and rugged drainages that drain into it. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from ¼ mile to 2 miles. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 41 air miles to the northwest. Access from Vernal is approximately 60.5 road miles following Utah State, Uintah County and oilfield development roads. The existing access road will be adequate and will be used.

Three wells will be directionally drilled from this location. They are the NBU 1022-11J1BS, NBU 1022-11J1CS, NBU and the NBU 1022-11K4BS. The existing location has one existing well. This well is the NBU 1022-11J, and at this time the decision rather to PA or TA this well has not been made. The location is on a flat topped ridge that runs in a northeast-southwest direction. This ridge breaks off sharply into rugged secondary canyons on the north, west and east sides. No drainage concerns exist, and no diversions will be needed. The pad as modified should be stable and sufficient for four wells, and is the best site for a location in the immediate area.

Excess material will be stockpiled on the east and south sides of the location. Approx. 50' of additional construction will be necessary on all sides of the original location.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA and Ben Williams with DWR were invited by email to the pre-site evaluation. Jim Davis was present. Kerr McGee was told to consult with SITLA for reclamation standards including seeding mixes to be used.

David Hackford 8/18/2011
Onsite Evaluator Date / Time

Conditions of Approval / Application for Permit to Drill

RECEIVED: October 27, 2011

Application for Permit to Drill Statement of Basis

10/27/2011 Utah Division of Oil, Gas and Mining

Page 2

Category Condition

Pits A synthetic liner with a minimum thickness of 30 mils with a felt subliner shall be properly installed and maintained in the

reserve pit.

Pits The reserve pit should be located on the east side of the location.

RECEIVED: October 27, 2011

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/10/2011 **API NO. ASSIGNED:** 43047518430000

WELL NAME: NBU 1022-11J1CS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6100

CONTACT: Andy Lytle

PROPOSED LOCATION: NWSE 11 100S 220E **Permit Tech Review:**

> **SURFACE: 1990 FSL 2130 FEL Engineering Review:**

> **BOTTOM:** 2065 FSL 1797 FEL Geology Review:

COUNTY: UINTAH

LATITUDE: 39.96160 LONGITUDE: -109.40540

UTM SURF EASTINGS: 636194.00 NORTHINGS: 4424713.00

FIELD NAME: NATURAL BUTTES LEASE TYPE: 3 - State

LEASE NUMBER: UO1197A-ST PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 3 - State COALBED METHANE: NO

RECEIVED AND/OR REVIEWED: LOCATION AND SITING:

✓ PLAT R649-2-3.

Unit: NATURAL BUTTES Bond: STATE/FEE - 22013542

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Drilling Unit Oil Shale 190-13

Board Cause No: Cause 173-14 Water Permit: 43-8496

Effective Date: 12/2/1999 **RDCC Review:**

Siting: 460' Fr U Bdry & Uncommitted Tracts **Fee Surface Agreement**

✓ Intent to Commingle ▼ R649-3-11. Directional Drill

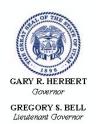
Commingling Approved

Comments: Presite Completed

Stipulations:

3 - Commingling - ddoucet 5 - Statement of Basis - bhill 15 - Directional - dmason 17 - Oil Shale 190-5(b) - dmason 25 - Surface Casing - hmacdonald

API Well No: 43047518430000



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 1022-11J1CS API Well Number: 43047518430000 Lease Number: UO1197A-ST Surface Owner: STATE

Approval Date: 10/27/2011

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

API Well No: 43047518430000

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels OR
- submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas

SUBMIT AS EMAIL

Print Form

BLM - Vernal Field Office - Notification Form

_	mitted Dr. 1. Cohamanula		-						
	mitted By <u>J. Scharnowske</u>		nber <u>720.</u>	929.6304					
Well Name/Number NBU 1022-11J1CS Qtr/Qtr NWSE Section 11 Township 10S Range 22E									
Qtr/(Qtr NWSE Section 11	Township 1	<u>0S</u> R	ange <u>22E</u>					
	se Serial Number <u>UO1197A-S</u>	<u>T</u>	·						
API I	Number <u>4304751843</u>			· · · · · · · · · · · · · · · · · · ·					
	<u>d Notice</u> – Spud is the initial below a casing string.	spudding of	f the we	ll, not drillin					
	Date/Time <u>05/09/2012</u>	09:00 HRS	АМ 🗌	РМ					
Casin time:	ng – Please report time casis. Surface Casing Intermediate Casing Production Casing	ing run start	RE(ementing CEIVED Y 0 8 2012					
	Liner Other								
	Date/Time <u>05/25/2012</u>	<u>08:00 HRS</u>	AM 🔛	PM					
BOP!	E Initial BOPE test at surface BOPE test at intermediate 30 day BOPE test Other								
	Date/Time	Manager de l'American de l'Ame	AM 🗌	РМ					
Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT									
435.82	28.0986 OR LOVEL YOUNG AT 435.781.709	51							

Sundry Number: 25590 API Well Number: 43047518430000

	STATE OF UTAH		FORM 9			
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: UO1197A-ST			
SUNDR	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	oposals to drill new wells, significantly do reenter plugged wells, or to drill horizont n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-11J1CS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047518430000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 3779 720 929-0	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 11 Township: 10.0S Range: 22.0E Meridia	an: S	STATE: UTAH			
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
	ACIDIZE	ALTER CASING	CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION			
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK			
✓ SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
Date of Spud: 5/10/2012	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
3/10/2012	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL			
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION			
,	WILDOAT WELL DETERMINATION		OTHER:			
	WILDCAT WELL DETERMINATION	OTHER	<u>'</u>			
MIRU TRIPLE A BU RAN 14" 36.7# SC	COMPLETED OPERATIONS. Clearly show all ICKET RIG. DRILLED 20" COND HEDULE 10 CONDUCTOR PIP (. SPUD WELL LOCATION ON I HRS.	DUCTOR HOLE TO 40'. E. CEMENT WITH 28	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 16, 2012			
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBE 720 929-6304	R TITLE Regulartory Analyst				
SIGNATURE N/A		DATE 5/11/2012				
L + +4 * *		,,				

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

P.O. Box 173779

city DENVER

state CO zip 80217

Phone Number: (720) 929-6304

Well 1

API Number	Well	Name	QQ	QQ Sec Twp			Rng County		
4304751851	NBU 1022-11J1BS		NWSE 11 10S			22E	UINTAH		
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date				
B	99999	2900		5/9/2012	2	51	16 12012		
Comments: MIRI	I TRIPLE A BUCKET E	NC .	ſ	NSM	VD	<u> </u>			

SPUD WELL LOCATION ON 5/9/2012 AT 16:30 HRS.

Well 2

API Number	Well	Well Name QQ Sec Twp Rng C			Name QQ Sec Twp Rng County		QQ Sec Twp		County
4304751843	NBU 1022-11J1CS		1CS NWSE 11 10S		22E	UINTAH			
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date				
B	99999	2900	5/10/2012		511	6 12013			

Comments:

MIRU TRIPLE A BUCKET RIG.

WSMVD SPUD WELL LOCATION ON 5/10/2012 AT 10:30 HRS. BHL: nwse

Well 3

API Number	Well	Name	QQ	QQ Sec Twp			Rng County		
4304751816	NBU 1022-11K4BS	NWSE 11		108	22E	UINTAH			
Action Code	Current Entity Number	New Entity Number	Spud Date			ity Assignment Iffective Date			
В	99999	2900	5/10/2012		5/10/2012 5/11/2/6		16/2012		
Comments:									

MIRU TRIPLE A BUCKET RIG.

USMVD

SPUD WELL LOCATION ON 5/10/2012 AT 14:30 HRS.

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

JAIME SCHARNOWSKE

Name (Please Print)

Signature

REGULATORY ANALYST

5/11/2012

Title

Date

MAY 1 4 2012

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCE		FORM 9		
ı	5.LEASE DESIGNATION AND SERIAL NUMBER: UO1197A-ST				
SUNDR	Y NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	posals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
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2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047518430000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 73779 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: I1 Township: 10.0S Range: 22.0E Merid	ian: S	STATE: UTAH		
11. CHECI	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION		
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION		
6/7/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
MIRU AIR RIG ON 5 SURFACE CASING	COMPLETED OPERATIONS. Clearly show a 5/23/2012. DRILLED SURFAC AND CEMENTED. WELL IS WA NT JOB WILL BE INCLUDED WI REPORT.	E HOLE TO 2200'. RAN ITING ON ROTARY RIG.	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY June 13, 2012		
NAME (PLEASE PRINT) Cara Mahler	PHONE NUMB 720 929-6029	ER TITLE Regulatory Analyst I			
SIGNATURE	. 20 020 0020	DATE			
N/A		6/7/2012			

	STATE OF UTAH		FORM 9		
	5.LEASE DESIGNATION AND SERIAL NUMBER: UO1197A-ST				
SUNDF	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
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11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
7	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start: 6/28/2012	✓ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
0/20/2012	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN [FRACTURE TREAT	☐ NEW CONSTRUCTION		
Date of Work Completion.	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION		
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show al	pertinent details including dates.	depths, volumes, etc.		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. The operator requests authorization to shallow the subject well to the Mesaverde formation. As well as approval for a fit waiver, a closed loop drill option, and a production casing change. ALL OTHER ASPECTS OF THE PREVIOUSLY APPROVED DRILLING PLAN WILL NOT CHANGE. PLEASE SEE THE ATTACHMENT. THANK YOU. By: 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Approved by the Utah Division of Oil, Gas and Mining Oil, Gas and Oil, Gas and Mining Oil, Gas and Oil, G					
NAME (PLEASE PRINT) Cara Mahler	PHONE NUMBE 720 929-6029	R TITLE Regulatory Analyst I			
SIGNATURE N/A		DATE 6/28/2012			

NBU 1022-11J1CS Drilling Program
1 of 7

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-11J1CS

Surface: 1990 FSL / 2130 FEL NWSE BHL: 2065 FSL / 1797 FEL NWSE

Section 11 T10S R22E

Uintah County, Utah Mineral Lease: UO1197A-ST

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. & 2. <u>Estimated Tops of Important Geologic Markers</u>: <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations</u>:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	0,874'	
Birds Nest	1,177'	Water
Mahogany	1,704'	Water
Wasatch	4,019'	Gas
Mesaverde	6,278'	Gas
Sego	8,417'	Gas
TVD	8,417'	
TD	8,444'	

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program

4. <u>Proposed Casing & Cementing Program:</u>

Please refer to the attached Drilling Program

5. <u>Drilling Fluids Program:</u>

Please refer to the attached Drilling Program

Evaluation Program:

Please refer to the attached Drilling Program

NBU 1022-11J1CS Drilling Program 2 of 7

7. **Abnormal Conditions:**

Maximum anticipated bottom hole pressure calculated at 8417' TVD, approximately equals 5,134 psi 0.61 psi/ft = actual bottomhole gradient

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,305 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the attached Drilling Program. Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- · Blowout Prevention Equipment (BOPE) requirements;
- · Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

NBU 1022-11J1CS Drilling Program 3 of 7

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

NBU 1022-11J1CS Drilling Program 4 of 7

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. <u>Other Information:</u>

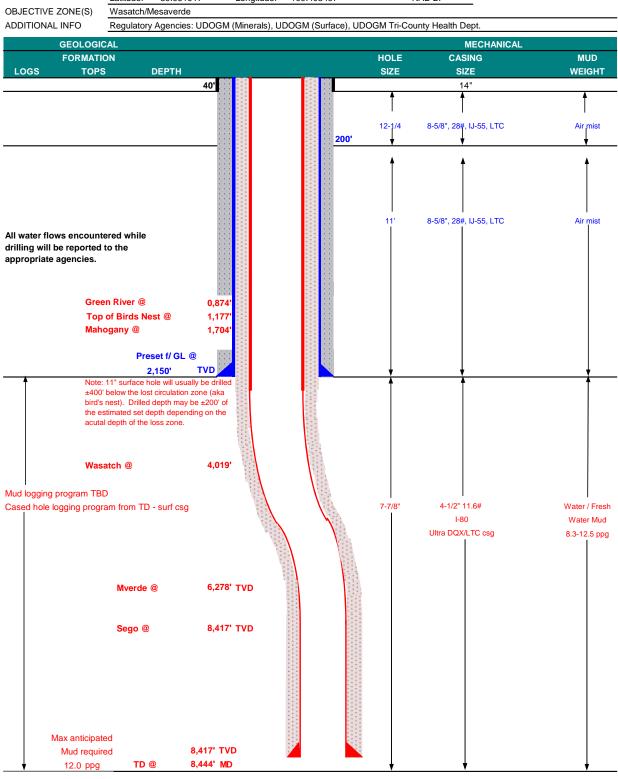
Please refer to the attached Drilling Program.

NBU 1022-11J1CS Drilling Program 5 of 7



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME KE	RR-McGEE O	IL & GAS ONSH	IORE LP		DATE	June 28	, 2012	
WELL NAME NE	BU 1022-11	J1CS			TD	8,417'	TVD	8,444' MD
FIELD Natural Butt	es	COUNTY	Uintah S	STATE Uta	h	FINISH	HED ELEVATION	5077.8
SURFACE LOCATION	NWSE	1990 FSL	2130 FEL	Sec 11	T 10S	R 22E		
	Latitude:	39.96171	Longitude	e: -109.40	4686		NAD 27	
BTM HOLE LOCATION	NWSE	2065 FSL	1797 FEL	Sec 11	T 10S	R 22E		
	Latitude:	39.961917	Longitude	e: -109.40	3497		NAD 27	
OBJECTIVE ZONE(S)	Wasatch/M	lesaverde						
ADDITIONAL INFO	Regulatory	Agencies: UDO	GM (Minerals)	, UDOGM (S	urface), l	JDOGM Tri-	County Health Dep	t.



NBU 1022-11J1CS Drilling Program
6 of 7



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM DESIGN FACTORS DQX SIZE **INTERVAL** CPLG. **BURST COLLAPSE TENSION** CONDUCTOR 0-40' 3,390 1,880 348,000 N/A 8-5/8" 2,150 28.00 1.1-55 SURFACE 0 LTC 2.52 1.87 6.60 N/A 6,350 7,780 223,000 267,035 **PRODUCTION** 4-1/2" 0 5.000 11.60 I-80 1.21 DOX 1.11 3.34 6,350 223,000 267,035 7,780 to 8,444' 4-1/2" 5,000 11.60 I-80 LTC 1.11 1.21 6.84

Surface Casing:

(Burst Assumptions: TD =

12.0

ppg)

0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @

7000 psi)

0.61 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGH	łT .	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1		+ 0.25 pps flocele					
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
		+ 2% CaCl + 0.25 pps flocele					
SURFACE		NOTE: If well will circulate water	to surface,	option 2 wi	ll be utilized		
Option 2 LEAD	1,650'	65/35 Poz + 6% Gel + 10 pps gilsonite	150	35%	11.00		3.82
		+ 0.25 pps Flocele + 3% salt BWOW					
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
		+ 0.25 pps flocele					
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION LEAD	3,514'	Premium Lite II +0.25 pps	280	35%	12.00		3.38
		celloflake + 5 pps gilsonite + 10% gel					
		+ 0.5% extender					
TAIL	4,930'	50/50 Poz/G + 10% salt + 2% gel	1,170	35%	14.30		1.31
		+ 0.1% R-3					

 $^{{}^{\}star}$ Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION

Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well.

1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

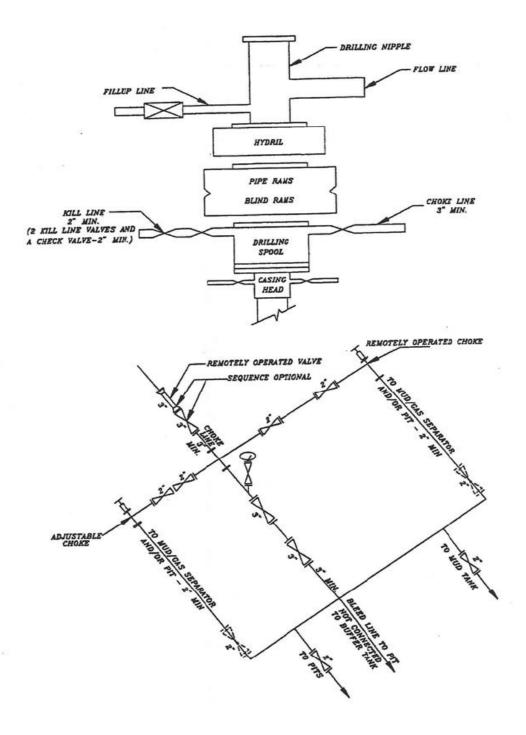
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:		DATE:		
	Nick Spence / Danny Showers / Travis Hansell			
DOILLING SUDEDINTENDENT:		DATE:		

Kenny Gathings / Lovel Young

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

EXHIBIT A
NBU 1022-11J1CS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Requested Drilling Options:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

RECEIVED: Jun. 28, 2012

	FORM 9		
ι	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	G	5.LEASE DESIGNATION AND SERIAL NUMBER: UO1197A-ST
SUNDR	Y NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for pro current bottom-hole depth, r FOR PERMIT TO DRILL form	posals to drill new wells, significantly dee eenter plugged wells, or to drill horizontal for such proposals.	pen existing wells below laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-11J1CS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047518430000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	PH n Street, Suite 600, Denver, CO, 80217 37	ONE NUMBER: 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NIATUERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWSE Section: 1	IIP, RANGE, MERIDIAN: 1 Township: 10.0S Range: 22.0E Meridian:	S	STATE: UTAH
11. CHECK	CAPPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
SUBSEQUENT REPORT	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
Date of Work Completion:	L DEEPEN L	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
✓ DRILLING REPORT	L TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
Report Date: 8/3/2012	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
0/3/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:
l .	completed operations. Clearly show all portion of July 2012. Surface c		epths, volumes, etc. Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 07, 2012
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulartory Analyst	
SIGNATURE N/A		DATE 8/3/2012	

	STATE OF UTAH		FORM 9		
ι	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: UO1197A-ST		
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
	posals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-11J1CS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047518430000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	PHC n Street, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NIATUERAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSH	HP, RANGE, MERIDIAN: 1 Township: 10.0S Range: 22.0E Meridian:	s	STATE: UTAH		
11. CHECI	K APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	T, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
_	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION		
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
✓ DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION		
9/5/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
	COMPLETED OPERATIONS. Clearly show all per the month of August 2012. W		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY September 10, 2012		
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE Regulatory Analyst II			
Lindsey Frazier SIGNATURE	720 929-6857	Regulatory Analyst II			
N/A		DATE 9/5/2012			

Sundry Number: 29990 API Well Number: 43047518430000

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES		FORM 9			
ı	5.LEASE DESIGNATION AND SERIAL NUMBER: UO1197A-ST					
SUNDR	RY NOTICES AND REPORTS ON	I WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	posals to drill new wells, significantly dee reenter plugged wells, or to drill horizonta n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-11J1CS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047518430000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	PH h Street, Suite 600, Denver, CO, 80217 37	IONE NUMBER: 779 720 929-6	9. FIELD and POOL or WILDCAT: 5NATUERAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 11 Township: 10.0S Range: 22.0E Meridian	: S	STATE: UTAH			
11. CHEC	K APPROPRIATE BOXES TO INDICATE I	NATURE OF NOTICE, REPOR	T, OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
	☐ ACIDIZE ☐	ALTER CASING	CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION			
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK			
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL			
DRILLING REPORT Report Date:	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	APD EXTENSION			
9/15/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. FINISHED DRILLING TO 8,440.00' ON 09/13/2012. CEMENTED PRODUCTION CASING. RELEASED PIONEER 54 RIG ON 09/15/2012.DETAILS OF CASING AND CEMENT WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES. September 18, 2012						
NAME (PLEASE PRINT) Lindsey Frazier	PHONE NUMBER 720 929-6857	TITLE Regulatory Analyst II				
SIGNATURE		DATE				
N/A		9/17/2012				

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54 Submitted By STUART NEILSON Phone Number 435-790-2921 Well Name/Number NBU 1022 11J1CS Qtr/Qtr NW/SE Section 11 Township 10S Range 22E Lease Serial Number <u>UO1197A-ST</u> API Number 4304751843 <u>Casing</u> – Time casing run starts, not cementing times. **Production Casing** Other Date/Time <u>9/14/12</u> <u>11</u> AM ☐ PM 🔀 BOPE Initial BOPE test at surface casing point Other Date/Time _ _ AM _ PM _ Rig Move **Location To:** Date/Time _ _ AM _ PM _ RECEIVED SEP 1 4 2012

DIV. OF OIL, GAS & MINING

Remarks

STATE OF UTAH					FORM 9	
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING				5.LEASE DESIGNATION AND SERIAL NUMBER: UO1197A-ST		
SUNDRY NOTICES AND REPORTS ON WELLS				6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.				7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well					8. WELL NAME and NUMBER: NBU 1022-11J1CS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.				9. API NUMBER: 43047518430000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 720 929-6					d POOL or WILDCAT: BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL				COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 11 Township: 10.0S Range: 22.0E Meridian: S					STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE N	ATURE OF NOTICE, REPOR	T, OR OTH	IER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION					
	ACIDIZE	A	ALTER CASING	☐ CA	SING REPAIR	
NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	□ c	CHANGE TUBING	Сн	ANGE WELL NAME	
Approximate date work will start:	CHANGE WELL STATUS	□ c	COMMINGLE PRODUCING FORMATIONS	□ cc	NVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	RACTURE TREAT	□ NE	W CONSTRUCTION	
Date of Work Completion.	OPERATOR CHANGE		PLUG AND ABANDON		UG BACK	
	PRODUCTION START OR RESUME	_	RECLAMATION OF WELL SITE		COMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION		SIDETRACK TO REPAIR WELL		MPORARY ABANDON	
✓ DRILLING REPORT	L TUBING REPAIR		ENT OR FLARE		ATER DISPOSAL	
Report Date: 11/5/2012	WATER SHUTOFF	□ s	SI TA STATUS EXTENSION	L AP	D EXTENSION	
, . ,	WILDCAT WELL DETERMINATION	∐ c	OTHER	OTHER:		
No Activity for	completed operations. Clearly show the month of October 2012	-	ell TD at 8,440.	Ac Ut Oil, FOR	cepted by the ah Division of Gas and Mining RECORD ONLY vember 05, 2012	
NAME (PLEASE PRINT) Jaime Scharnowske	. ` '		TITLE Regulartory Analyst			
			DATE			
SIGNATURE N/A			11/5/2012			

	FORM 9				
I	5.LEASE DESIGNATION AND SERIAL NUMBER: UO1197A-ST				
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES				
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-11J1CS				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	9. API NUMBER: 43047518430000				
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	9. FIELD and POOL or WILDCAT: 5NATURAL BUTTES				
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL	COUNTY: UINTAH				
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWSE Section:	STATE: UTAH				
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION				
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	ALTER CASING CHANGE TUBING	CASING REPAIR CHANGE WELL NAME		
SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS ☐ ☐ DEEPEN ☐	COMMINGLE PRODUCING FORMATIONS FRACTURE TREAT	CONVERT WELL TYPE NEW CONSTRUCTION		
·	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION	RECLAMATION OF WELL SITE SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON		
✓ DRILLING REPORT	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
Report Date: 12/3/2012	WILDCAT WELL DETERMINATION	SI TA STATUS EXTENSION OTHER	OTHER:		
	COMPLETED OPERATIONS. Clearly show all phe month of November 2012.	pertinent details including dates, d	<u> </u>		
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulartory Analyst			
SIGNATURE N/A		DATE 12/3/2012			

Sundry Number: 33573 API Well Number: 43047518430000

	STATE OF UTAH				FORM 9	
ı	DEPARTMENT OF NATURAL RESOUI DIVISION OF OIL, GAS, AND M		3	5.LEASE DESIGNATION AND UO1197A-ST	SERIAL NUMBER:	
SUNDR	Y NOTICES AND REPORTS	S ON	WELLS	6. IF INDIAN, ALLOTTEE OR	TRIBE NAME:	
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	posals to drill new wells, significantl reenter plugged wells, or to drill horiz n for such proposals.	ly deep zontal l	en existing wells below aterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER NBU 1022-11J1CS	R:	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047518430000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 802		NE NUMBER: 9 720 929-6	9. FIELD and POOL or WILD 5NATERAL BUTTES	CAT:	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL				COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWSE Section: 1	IIP, RANGE, MERIDIAN: 11 Township: 10.0S Range: 22.0E Me	ridian:	S	STATE: UTAH		
11. CHECI	K APPROPRIATE BOXES TO INDIC	ATE N	ATURE OF NOTICE, REPOR	T, OR OTHER DATA		
TYPE OF SUBMISSION			TYPE OF ACTION			
	ACIDIZE		ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING	CHANGE WELL NAME		
	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	☐ F	RACTURE TREAT	NEW CONSTRUCTION		
	OPERATOR CHANGE	☐ F	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT	PRODUCTION START OR RESUME	□ F	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT	T FORMATION	
Date of Spud:	REPERFORATE CURRENT FORMATION		SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	TUBING REPAIR		/ENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	WATER SHUTOFF		SI TA STATUS EXTENSION	APD EXTENSION		
1/3/2013	WILDCAT WELL DETERMINATION		OTHER	OTHER:		
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly sho	w all pe	rtinent details including dates, d	epths, volumes, etc.		
Started	d completing the well. Well	TD a	at 8,440	Accepted by the Utah Division of Oil, Gas and Min FOR RECORI January 07, 2	of ling DONLY	
				January 01, 2	.013	
NAME (PLEASE PRINT) Laura Abrams	PHONE NUN 720 929-6356	/IBER	TITLE Regulatory Analyst II			
SIGNATURE N/A			DATE 1/3/2013			

Sundry Number: 33745 API Well Number: 43047518430000

	STATE OF UTAH			FORM 9
ı	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI			5.LEASE DESIGNATION AND SERIAL NUMBER: UO1197A-ST
SUNDR	Y NOTICES AND REPORTS	S ON V	VELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly reenter plugged wells, or to drill horiz n for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER: NBU 1022-11J1CS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			9. API NUMBER: 43047518430000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021		IE NUMBER: 720 929-6	9. FIELD and POOL or WILDCAT: 5MATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL				COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HP, RANGE, MERIDIAN: I1 Township: 10.0S Range: 22.0E Mer	ridian: S		STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE NA	TURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	ACIDIZE	☐ AL	TER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	Сн	ANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	□ со	MMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	☐ FR	ACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PL	UG AND ABANDON	PLUG BACK
SPUD REPORT	✓ PRODUCTION START OR RESUME	RE	CLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIE	DETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	U VE	NT OR FLARE	WATER DISPOSAL
✓ DRILLING REPORT Report Date:	WATER SHUTOFF	☐ sı	TA STATUS EXTENSION	APD EXTENSION
1/7/2013	WILDCAT WELL DETERMINATION	Пот	HER	OTHER:
The subject wel	wildcat well determination completed operations. Clearly show I was placed on production I History will be submitted with the control of the	n on 0	1/07/2013. The	<u> </u>
NAME (PLEASE PRINT) Lindsey Frazier	PHONE NUM 720 929-6857		TITLE Regulatory Analyst II	
SIGNATURE N/A			DATE 1/10/2013	

STATE OF UTAH

DEPARTMENT OF N

MENDED REPORT 🗌	FORM 8
highlight changes)	

OF UTAIN	TEB U 5 2013	AMENDED REPORT []
NATURAL RESOURCES	• •	(highlight changes)
., GAS AND MINING 🖪	M OFOU	5. LEASE DESIGNATION AND SE

		D	IVISI	ON OF	F OIL,	GAS	AND	MININ	G DIV.	BFOIL, GA	AS & MINING		EASE DE			ERIAL NUMBER	₹:
WEL	L COMP										***	6. 11	F INDIAN,	ALLOT	TEE OR TRI	BE NAME	
1a. TYPE OF WELL	:	OIL WE		l G	SAS VELL V]	DRY		ОТН	ER					MENT NAM	IE.	
b. TYPE OF WORK													UTU6	_	A JUMBER:		
NEW VELL	HORIZ. LATS.	DEI EN	Р- 🔲	l R	NTRY]	DIFF. RESVR.		отн	ER					11J1C	3	
2. NAME OF OPERA	ATOR: GEE OIL (& GAS	S ON:	SHOR	E, L.P								РІ NUMB 43047		3		
3. ADDRESS OF OF P.O.BOX 17		0.7	», DE	NVER				ZIP 802	017		NUMBER:	10 F	IELD AN	D POOL,	OR WILDC		
4. LOCATION OF W			Y DE	INVER	•	STATE	CO	ZIP OUZ	217	(12	20) 929-6000				BUTTE		
AT SURFACE:	A section of the sect		SL 21:	30 FEI	_ S11,	T10S	,R22E					44.55			Section 2015 and 1997	SHIP, RANGE,	48.
AT TOP PRODU	CING INTERVAL	REPORT	TED BEL	.ow: N	WSE:	2061	FSL 1	802 F	EL S1	1.T10S.F	R22E	198	WSL		103	22E 3	
AT TOTAL DEPT										·*·		12.	COUNTY		1	3. STATE	
14. DATE SPUDDE		DATE T.E			16. DATE		and the state of t	.4E		***		U	JINTA				TAH
5/10/2012		/13/20		TED:	0.0000.00000000	2013	ETED:	,	ABANDON	ED 🗌	READY TO PRODU	CE 🖊		097 F	IS (DF, RKB RKB	, RT, GL):	
18. TOTAL DEPTH:	O THE	were over 100 groups over 1	1	9. PLUG	BACK T.D.	2:	8,382		20. IF I	MULTIPLE CO	OMPLETIONS, HOW	MANY? *	21. DEF	PTH BRII			
22. TYPE ELECTRIC	TVD 8,416		201.100	C DIIN (C	`uhmit aan		8,358			Too					TVE)	
						y or each))			23. WAS WEL	L CORED?	NO	/	YES [] (Subr	nit analysis)	
QUAD COM	івО-впР-С	SBL/G	sK/C(MP					WAS DST	RUN?	NO		YES _	i '	nit report)	
24. CASING AND L	INED DECORD (DIRECTIO	NAL SURVEY?	NO		YES 🗸	(Subr	nit copy)	
	l			1					STACE (CEMENTER	CEMENT TYPE 0	-	DDV	1		I	
HOLE SIZE	SIZE/GRADE	V	VEIGHT	(#/ft.)	TOP (I	MD)	BOTTO	M (MD)		EPTH	CEMENT TYPE & NO. OF SACKS		RRY IE (BBL)	CEME	ENT TOP **	AMOUNT P	ULLED
20"	14" S	TL	36.7		0		4	0			28						
11"	STATEMENT CONTROL	55	28#		0			186			734				0		
7 7/8"	4 1/2" I-	-80	11.6	5#	0		8,4	129			1,832				98	ļ	
														ļ		ļ	
														 		<u> </u>	
25. TUBING RECO	RD								l			4. 4.				<u> </u>	
SIZE	DEPTH SET	(MD)	PACKE	ER SET (N	ID)	SIZE		DEPTH	SET (MD)	PACKE	R SET (MD)	SIZE	T	DEPTH S	SET (MD)	PACKER SET	T (MD)
2 3/8"	7,65	4															
26. PRODUCING IN											RATION RECORD						
FORMATION (A) MESAVE		6,2		BOTTO)52	100	(TVD)	вотто	M (TVD)	2 Min	L (Top/Bot - MD)	SIZE	NO. HO			RATION STATU	s 7
(B)	NDE	0,2	30	7,8	,52			-		6,238	7,952	0.36	15:		pen 🗸	Squeezed Squeezed	
(C)														-	pen	Squeezed	<u> </u>
(D)								<u> </u>							pen	Squeezed	
28. ACID, FRACTU	RE, TREATMENT	r, CEMEN	IT SQUE	EZE, ETC					•	- CONT. 10-10-10-10-10-10-10-10-10-10-10-10-10-1			<u> </u>		<u></u>		
DEPTH	INTERVAL								AM	OUNT AND T	YPE OF MATERIAL						
6238-7952						S SL	ICK H	20 & 1	134,83	5 LBS 3	0/50 OTTAW	/A SAN	ND				
			7 ST	AGES	<u> </u>												
29. ENCLOSED AT	TACHMENTS						-		-						Inn 1115		
ENGLUSED AT	TACHMEN 15:									_					30. WEL	L STATUS:	
_	RICAL/MECHANI								IC REPOR	т 🔲	DST REPORT	DIREC	CTIONAL :	SURVEY	·	PROD	
SUNDF	RY NOTICE FOR	PLUGGII	NG AND	CEMENT	VERIFICA	TION	Ш	CORE AN	ALYSIS		OTHER:		·····		.		

31	INITAL	PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRO	ODUCED:	TEST DATE:		HOURS TESTED):		OIL - BBL;	GAS - MCF:	WATER - BBL:	PROD. METHOD:
1/7/2013		1/12/2013	3	2	24	RATES: →	0	1,983	205	FLOWING
CHOKE SIZE: 20/64	TBG, PRESS. 839	CSG. PRESS. 1,387	API GRAVITY	BTU – GAS	BTU – GAS GAS/OIL RATIO		OIL – BBL: 0	GAS - MCF: 1,983	WATER - BBL: 205	INTERVAL STATUS: PROD
				INT	ERVAL B (As sho	wn in item #26)				
DATE FIRST PRO	ODUCED:	TEST DATE:		HOURS TESTED);	TEST PRODUCTION RATES: →	OIL – BBL;	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:
				INT	ERVAL C (As sho	wn in item #26)				
DATE FIRST PRO	ODUCED:	TEST DATE:		HOURS TESTED):	TEST PRODUCTION RATES: →	OIL BBL:	GAS MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE;	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS:
				INT	ERVAL D (As sho	wn in item #26)			·!	
DATE FIRST PRO	ODUCED:	TEST DATE:		HOURS TESTED):	TEST PRODUCTION RATES: →	OIL – BBL:	GAS MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS:
32. DISPOSITIO SOLD	N OF GAS (Sold,	Used for Fuel, Ve	ented, Etc.)			1	L	- !		1

33. SUMMARY OF POROUS ZONES (Include Aquifers):

34. FORMATION (Log) MARKERS:

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				GREEN RIVER BIRD'S NEST MAHOGANY WASATCH MESAVERDE	878 1,186 1,721 4,041 6,206

35. ADDITIONAL REMARKS (Include plugging procedure)

The first 210' of the surface hole was drilled with a 12 1/4" bit. The remainder of surface hole was drilled with an 11" bit. DQX csg was run from surface to 5050'; LTC csg was run from 5050' to 8429'. Attached is the chronological well history, perforation report & final survey.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) LINDSEY FRAZIER SIGNATURE (

TITLE REGULATORY ANALYST

1/28/2013

This report must be submitted within 30 days

- completing or plugging a new well · drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- · reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- * ITEM 20: Show the number of completions if production is measured separately from two or more formations.
- ** ITEM 24: Cement Top Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Operation Summary Report

Well: NBU 1022	-11J1CS	BLUE						Spud Date: 5/23/2012
Project: UTAH-U	JINTAH			Site: NBU	J 1022-11	J PAD		Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING	3			Start Date	e: 5/10/20	112		End Date: 9/15/2012
Active Datum: R Level)	KB @5,0	97.00usft (al	oove Mean Se	ea	UWI: N\	N/SE/0/10	0/S/22/E/	1/0/0/26/PM/S/1990/E/0/2130/0/0
Date France	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
5/23/2012		- 17:30	1.50	DRLSUR	01	С	Р	SKID RIG TO WELL 2/3 NBU 1022-11J1CS AND RIG UP
		- 19:30	2.00	DRLSUR	23		Ž	SEAN PETERSON WAS STRUCK IN FACE WITH DOUBLE HOOKS ON THE END OF WENCH LINE WAS TAKEN TO HOSPITAL
		- 21:00	1.50	DRLSUR	07	A	P	CHANGE OUT SAVER SUB
	21:00	- 22:00	1.00	DRLSUR	02	С	P	SPUD 05/23/2012 21:00 hrs. DRILL 12:25" HOLE 44'-210' (166', 110'/PER HOUR). 12:25 in. BIT ON 49 th RUN. WEIGHT ON BIT 5-15 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF (BOTTOM) 800/600. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROTATE 20/20/20 K. DRAG 0 K.
								CIRCULATE CLOSED LOOP SYSTEM WITH 8.5# WATER. DRILL DOWN TO 210' WITH 6" DRILL COLLARS.
	22:00	- 23:30 - 0:00	1.50 0.50	DRLSUR	06	Α	P	TOOH FOR DIRECTIONAL ASSEMBLY PICK UP 11" BIT AND ALL DIRECTIONAL TOOLS DID NOT INSTALL MWD TOOL
5/24/2012	0:00	- 12:00	12.00	DRLSUR DRLSUR	23 23		P P	SAFETY STAND DOWN
0,24,2012		- 21:00	9.00	DRLSUR	01	Α	Р	SAFETY STAND DOWN ALL RIG HANDS AT PRO PETRO OFFICE AT 0700 FOR SAFETY MEETING
	21:00	- 0:00	3.00	DRLSUR	21	C	P	RIG DOWN AND LOAD OUT RIG TO MOVE 36 MILES TO THE BON 1023-51 PAD 60% RIG MOVED
6/4/2012		- 22:00	11.00	DRLSUR	01	A	P	WAIT ON DAYLIGHT TO CONTINUE RIG UP
01-1720 12		- 0:00	2.00	DRLSUR	01	В	P	MOVE RIG 44 MILES TO THE NBU 1022-11J1CS WELL 2/3
		0,00	2.00	DRESOR	O1	Ь	P	RIG UP ON WELL 2/3 INSPECT TO INSPECT BHA AND DRILL PIPE MECHANIC INSPECTED MUD PUMP GEAR END AND MOTOR RIG UP
6/5/2012	0:00	- 2:00	2.00	DRLSUR	01	В	P	RIG UP ON WELL 2/3 FINISH PIPE INSPECTION
		- 3:00	1.00	DRLSUR	06	Α	Р	PICK UP 12.25" BIT AND MUD MOTOR AND TRIP IN HOLE TO CLEAN OUT WELL
	3:00	- 6:30	3,50	DRLSUR	80	В	Z	WORK ON MUD PUMP
	6:30	- 7:30	1.00	DRLSUR	06	Α	Р	TRIP IN HOLE WITH 12.25" BIT TO CLEAN OUT HOLE
	7:30	- 11:00	3.50	DRLSUR	06	A	P	AND CIRCULATE TRIP OUT TO CHANGE ASSEMBLY. PRE JOB SAFETY MEETING, LAY DOWN 6" DRILL COLLARS, BREAK 12 1/4" BIT. MAKE UP Q506F 11" BIT (2 ND RUN) (SN 7031553) PICK UP 8" DIRECTIONAL ASSEMBLY. INSTALL EM
	11:00	- 11:30	0.50	DRLSUR	07	Α	Р	TRIP IN HOLE. DAILY RIG SERVICE

1/21/2013

4:45:06PM

						KIES RE Summa	EGION Iry Report
Well: NBU 1022-	-11J1CS BLUE	<u>. Alikata edh</u>					Spud Date: 5/23/2012
Project: UTAH-U			Site: NBU	J 1022-1	1J PAD		Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING	3		Start Date	e: 5/10/2	012		End Date: 9/15/2012
Active Datum: R _evel)	KB @5,097.00usft (ab	ove Mean S				0/S/22/E/1	1/0/0/26/PM/S/1990/E/0/2130/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
	11:30 - 0:00	12.50	DRLSUR	02	C	Р	DRILL 11" SURFACE HOLE 210' - 1720' (1510' AT 120 FT HR) WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 1090/880. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROTATE 75/58/68 K. DRAG 10 K. LOSS CIRCULATION AT 1300' AIR ON AT 1500 CFM
							SLIDING 15'-20 PER 90'OF ROTATION GETTING 1.8 DEGREE BUILD RATES LANDED 1.5' ABOVE 2' RIGHT SLIDING 136' AT 7.5% LAST SURVEY 7.83 DEG 70.15 AZI
6/6/2012	0:00 - 5:30	5.50	DRLSUR	02	С	Р	CIRCULATE CLOSED RESERVE PIT DRILL 11" SURFACE HOLE 1720' - 2200 (480' AT 87 FT HR) WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 1090/880. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROTATE 80/60/70 K. DRAG 10 K. LOSS CIRCULATION AT 1300' AIR ON AT 1500 CFM
							SLIDING 15'-20 PER 90'OF ROTATION GETTING 1.8 DEGREE BUILD RATES LANDED 1.5' ABOVE 2' RIGHT SLIDING 136' AT 7.5% LAST SURVEY 7.83 DEG 70.15 AZI
	5:30 - 7:30	2.00	DRLSUR	05	С	P	CIRCULATE CLOSED RESERVE PIT
	7:30 - 10:30	3.00	DRLSUR	06	Ď	P	CIRCULATE AND CONDITION MUD PRIOR TO LDDS LAY DOWN DRILL STRING AND, BOTTOM HOLE
	10:30 - 15:00	4.50	DRLSUR	12	С	P	ASSEMBLY, BREAK BIT, LAY DOWN MOTOR. RIG UP AND RUN 51 JOINTS 8.625 28# J55 SURFACE CASING SHOE AT 2166.00' BAFFLE AT 2120.10' RUN 200' OF 1" PIPE DOWN BACK SIDE AND RIG DOWN.

1/21/2013 4:45:06PM

2

Well: NBU 1022	-11J1CS BLUE		<u>·</u>				Spud Date: 5/2	23/2012		
Project: UTAH-L	JINTAH		Site: NBI	J 1022-11	IJ PAD			Rig Name No: PROPETRO 12/12, PIONEER 54/54		
Event: DRILLING			Start Dat	e: 5/10/20	112	_		End Date: 9/15/2012		
Active Datum: R	KB @5,097.00usft (above Mean S		T		0/S/22/E/1	1/0/0/26/PM/S/1	990/E/0/2130/0/0		
Level) Date	Time	- Dunation I	Phase	Code	T 2.5 1	Data				
	Start-End 15:00 - 19:00	Duration (hr)			Sub Code	P/U	MD From (usft)	Operation		
9/11/2012	16:30 - 17:00	0.50	DRLSUR	01	E	P		PRESSURE TEST LINES TO 2000 PSI. PUMP 125 BBLS OF WATER AHEAD. CATCH PSI. PUMP 20 BBLS OF 8.3# GEL WATER AHEAD. MIX AND PUMP (300 SX) 61.4 BBLS OF 15.8# 1.15 YD 5 GAL/SK PREMIUM CEMENT W/ 2% CALC. DROP PLUG ON FLY. DISPLACE W/ 132 BBLS OF H20. NO CIRC THROUGH OUT. FINAL LIFT OF 150 PSI AT 4 BBL/MIN. BUMP PLUG WITH 450 PSI FOR 5 MIN. FLOAT HELD. MIX AND PUMP (150 SX) 30.7 BBLS OF SAME TAIL CEMENT W/ 4% CALC. DOWN BACKSIDE, NO CEMENT TO SURFACE. SHUT DOWN AND CLEAN TRUCK. WAIT 1.5 HOURS MIX AND PUMP (125 SX) 22.4 BBLS OF SAME TAIL CEMENT W/ 4% CALC. DOWN BACKSIDE NO CEMENT TO SURFACE. SHUT DOWN AND CLEAN TRUCK. RELEASE RIG AT 19:00 6-6-12. 10' RIG SKID TO NBU 1022-11J1CS, SAFETY MEETING		
	17:00 - 17:30	0.50	DRLPRC	14	Α	P		NIPPLE UP BOPE		
	17:30 - 21:00 21:00 - 21:30	3.50 0.50	DRLPRC DRLPRC	15 14	A B	P P		TEST BOPE, BLIND RAMS, PIPE RAMS, INNER & OUTER CHOKE LINES, KILL LINE, 250 LOW, 5000 HIGH, ANN 250-2500, CASING 1500 FOR 30 MINS INSTALL WEAR BUSHING		
	. 21:30 - 23:00	1.50	DRLPRC	06	Α	Р		PICKING UP BIT, MOTOR, AND DIRECTIONAL TOOLS,		
	23:00 - 0:00	1.00	DRLPRC	02	F	Р		TRIPPING IN THE HOLE TO CEMENT DRILL CEMENT, F/E & OPEN HOLE TO 2215', SHOE @ 2181', BAFFLE @ 2135'		
9/12/2012	0:00 - 0:30	0.50	DRLPRC	02	F	Р		DRILL CEMENT, F/E & OPEN HOLE TO 2215', SHOE @ 2181', BAFFLE @ 2135'		
	0:30 - 17:00	16.50	DRLPRC	02	В	P		CLOSED LOOP SYSTEM DRILL F/ 2215 TO 5694', 3479' @ 210.8' PH WOB / 22-24 RPM TOP DRIVE 50-60 SPM 200 GPM 586 MW 8.5 PPG 29 VIS TRQ ON/OFF = 6-8 K PSI ON /OFF 2100-1800, DIFF 200-500 PU/SO/RT = 150-120-135 K SLIDE = 82' IN 1.07 HRS = 76.6' PH ROT = 3397' IN 15.43 HRS = 220.2' PH NOV / 2- DEWATERING 9.5' S & 6' W OF TARGET CENTER 0 DRILL FLARE, 0 CONN FLARE		
	17:00 - 17:30	0.50	DRLPRC	07	À	Р		NO MUD LOSS SERVICE RIG, BOP DRILL 69 SEC, F/T HCR & CROWN-O-MATIC		

Operation Summary Report

					Opera	tion S	umma	ry Report			
Well: NBU 1022	2-11J1CS	BLUE						Spud Date: 5/2	/2012		
Project: UTAH-	UINTAH			Site: NBU	J 1022-11	J PAD			Rig Name No: PROPETRO 12/12, PIONEER 54/54		
Event: DRILLIN	G			Start Date	e: 5/10/20	12		"	End Date: 9/15/2012		
Active Datum: F Level)	RKB @5,0	97.00usft (a	bove Mean S	ea	UWI: N\	N/SE/0/1	0/S/22/E/1	1/0/0/26/PM/S/1	990/E/0/2130/0/0		
Date	Sta	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation		
		- 21:00	3.50	DRLPRC	02	В	P		CLOSED LOOP SYSTEM DRILL F/ 5694' TO 6169', 475' @ 135.7' PH WOB / 22-24 RPM TOP DRIVE 50-60 SPM 200 GPM 586 MW 8.5 PPG 29 VIS TRQ ON/OFF = 6-8 K PSI ON /OFF 2200-1900, DIFF 200-500 PU/SO/RT = 160-125-140 K SLIDE = 26' IN .5 HRS = 52' PH ROT = 449' IN 3 HRS = 149.6' PH NOV / 2- DEWATERING 5.44 N & 4.08 W OF TARGET CENTER 0 DRILL FLARE, 0 CONN FLARE LOST 150 BBLS SEEPAGE TO FORMATION		
	21:00	- 21:30	0.50	DRLPRC	22	K	Z		CLEAN PUMP SCREENS		
		- 0:00	2.50	DRLPRC	02	В	P		CLOSED LOOP SYSTEM DRILL F/ 6169' TO 6544', 375' @ 150' PH WOB / 22-24 RPM TOP DRIVE 50-60 SPM 200 GPM 586 MW 8.5 PPG 29 VIS TRQ ON/OFF = 6-8 K PSI ON /OFF 2300-2000, DIFF 200-500 PU/SO/RT = 165-146-156 K SLIDE = 0 ROT = 100% NOV / 2- DEWATERING 8' N & 9' W OF TARGET CENTER 0 DRILL FLARE, 0 CONN FLARE LOST 150 BBLS TO FORMATION		
9/13/2012	10:00	- 10:00 - 10:30	0.50	DRLPRV	02	В	P		CLOSED LOOP SYSTEM DRILL F/ 6544' TO 7886', 1342' @ 134.2' PH WOB / 22-24 RPM TOP DRIVE 50-60 SPM 200 GPM 586 MW 8.5 PPG 29 VIS TRQ ON/OFF = 6-8 K PSI ON /OFF 2300-2000, DIFF 200-500 PU/SO/RT = 210-150-175 K SLIDE = 0 ROT = 100% NOV / 2- DEWATERING 6.9' N & 4' W OF TARGET CENTER 0 DRILL FLARE, 0 CONN FLARE LOST 150 BBLS TO FORMATION SERVICE RIG		
	10:30	- 11:30	1.00	DRLPRV	22	K	Z		CHANGE OUT VALVES & SEAT #1 PUMP, PISTON		
									#2 PUMP		

1/21/2013 4:45:06PM

US ROCKIES REGION Operation Summary Report

Well: NBU 1022	2-11J1CS BLUE						Spud Date: 5/2	23/2012
Project: UTAH-I	JINTAH		Site: NBI	J 1022-11	J PAD	***		Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLIN	G		Start Dat	e: 5/10/20	12	1		End Date: 9/15/2012
Active Datum: F	RKB @5,097.00usft (a	bove Mean S	ea	UWI: N	N/SE/0/1	0/S/22/E/1	1/0/0/26/PM/S/1	990/E/0/2130/0/0
Level)	,							
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	11:30 - 19:00	7.50	DRLPRV	02	В	Р		CLOSED LOOP SYSTEM
								DRILL F/7886' TO 8440', 554' @ 73.8' PH
								WOB / 22-24
								RPM TOP DRIVE 50-60 SPM 200 GPM 586
								MW 10 PPG 35 VIS
								TRQ ON/OFF = 6-8 K
								PSI ON /OFF 2300-2000, DIFF 200-500
								PU/SO/RT = 220-160-180 K
								SLIDE = 0
								ROT = 100%
								NOV / 2- ON BYPASS 12.11' S & 5.5' W OF TARGET CENTER
								5 DRILL FLARE, 10 CONN FLARE
								LOST 150 BBLS TO FORMATION
								DISPLACE HOLE W/ 10 PPG MUD, RAISE MW TO 11, VIS TO 38
	19:00 - 22:30	3.50	DRLPRV	05	С	Р		CIRC & COND MUD FOR SHORT TRIP, RAISE MW TO 11.4, VIS 39
	22:30 - 0:00	1.50	DRLPRV	06	E	Р		SHORT TRIP TO SHOE, BACK REAM TIGHT HOLE @ 4606' & 3867'
9/14/2012	0:00 - 5:30	5.50	DRLPRV	06	E	Р		SHORT TRIP TO SHOE, BACK REAM TIGHT HOLE @ 4606 & 3867, TRIP IN HOLE, REAM F/ 3867 TO 4606', TRIP IN HOLE, 10' FILL WITH 10' BOTTOMS UP FLARE
	5:30 - 9:00	3,50	DRLPRV	05	Α	Р		CIRC & COND MUD, RAISE MW TO 12 PPG, VIS TO 45
	9:00 - 13:00	4.00	DRLPRV	06	E	Р		SHORT TRIP TO SHOE (#2), NO TIGHT SPOTS
	13:00 - 15:00	2.00	DRLPRV	05	С	Р		CIRC & COND HOLE FOR TRIP FOR LOGS, 5' FLARE FOR 10 MIN
	15:00 - 19:00	4.00	DRLPRV	05	С	Р		PULL OUT OF HOLE FOR OPEN HOLE LOGS, LAY DOWN BIT, MM, DIR TOOLS
	19:00 - 0:00	5.00	EVALPR	11	G	Р		HELD SAFETY MEETING, RIG UP & RUN QUAD COMBO LOG DOWN TO 8417', & LOG OUT
9/15/2012	0:00 - 1:30	1.50	EVALPR	11	G	Р		OPEN HOLE LOGS FROM 8417'
	1:30 - 2:00	0.50	CSGPRO	14	В	Р		PULL WEAR BUSHING
	2:00 - 7:30	5.50	CSGPRO	12	С	Р		HELD SAFETY MEETING, R/U & RUN 76 JTS 4.5" LTC, 113 JTS 4.5" DQX CASING, SHOE @ 8429, FLOAT @ 8383', MESA MARKER @ 6307', X/O @ 5050'
	7:30 - 9:00	1.50	CSGPRO	12	Е	Р		CIRC OUT GAS & CLEAN HOLE TO CEMENT
	9:00 - 11:00	2.00	CSGPRO	21	D	Š		WAIT ON CONTRACT BULK CEMENT TRUCK
	11:00 - 16:00	5.00	CSGPRO	12	E	Р		HELD SAFETY MEETING, PSI TEST LINES TO 5000#,
								PUMP 25 BBLS WATER SPACER, LEAD + 0 % EXCESS, 450 SACKS 12.5 PPG 1.98 YLD, TAIL + 10% EXCESS, 1382 SACKS 14.3 PPG 1.32 YLD, SHUT DOWN & CLEAN LINES, DROP PLUG & DISPLACE WITH 136 BBLS CLAYCARE & MAGNICIDE WATER, BUMP PLUG @ 3400 PSI (700 PSI OVER FINAL LIFT OF 2700) FLOATS HELD, FULL RETURNS THOUGHOUT JOB WITH 20 BBLS
	16:00 - 16:30	0.50	CSGPRO	14	В	P		LEAD CEMENT TO CATH TANK SET PACKOFF

1/21/2013

4:45:06PM

				IES RE	GION y Report	
Well: NBU 1022-11J1CS BLUE					Spud Date: 5/23	/2012
Project: UTAH-UINTAH	Site: N	BU 1022-11J	PAD			Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING	Start D	Pate: 5/10/2012				End Date: 9/15/2012
Active Datum: RKB @5,097.00usft (above Level)	Mean Sea	UWI: NW	//SE/0/10/	S/22/E/11	/0/0/26/PM/S/19	90/E/0/2130/0/0
Date Time Di Start-End	uration Phase (hr)		Sub Code	P/U	MD From (usft)	Operation
16:30 - 18:00	1.50 RDMO	01	С	Р		N/D, CLEAN PITS, PREPARE TO SKID, RELEASE RIG TO THE NBU 1022-11K4BS @ 18:00

1/21/2013 4:45:06PM 6

1 General

1.1 Customer Information

Company	US ROCKIES REGION			
Representative				
Address			 	

1.2 Well/Wellbore Information

Well	NBU 1022-11J1CS BLUE	Wellbore No.	ОН
Well Name	NBU 1022-11J1CS	Wellbore Name	NBU 1022-11J1CS
Report No.	1	Report Date	12/11/2012
Project	UTAH-UINTAH	Site	NBU 1022-11J PAD
Rig Name/No.		Event	COMPLETION
Start Date	12/11/2012	End Date	1/7/2013
Spud Date	5/23/2012	Active Datum	RKB @5,097,00usft (above Mean Sea Level)
UWI	NW/SE/0/10/S/22/E/11/0/0/26/PM/S/1990/E/0/21	30/0/0	

1.3 General

Contractor	Job Method	Supervisor	
Perforated Assembly	Conveyed Method		

1.4 Initial Conditions

1.5 Summary

Fluid Type		Fiuld Density	Gross Interval	6,238.0 (usft)-7,952.0 (usf	Start Date/Time	12/11/2012	12:00AM
Surface Press		Estimate Res Press	No. of Intervals	32	End Date/Time	12/11/2012	12:00AM
TVD Fluid Top		Fluid Head	Total Shots	153	Net Perforation Interval		49.00 (usft)
Hydrostatic Press		Press Difference	Avg Shot Density	3.12 (shot/ft)	Final Surface Pressure		
Balance Cond	NEUTRAL				Final Press Date		

2 Intervals

2.1 Perforated Interval

Date	Formation/	CCL@	CCL-T	MD Top	MD Base	Shot	Misfires/	Diamete	Carr Type /Stage No	Carr	Phasing	Charge Desc /Charge	Charge	Reason	Misrun
	Reservoir	(usft)	S	(usft)	(usft)	Density	Add. Shot	r		Size	(°)	Manufacturer	Weight		
		****	(usft)			(shot/ft)		(in)	14	(in)			(gram)		
12/11/201	MESAVERDE/			6,238.0	6,240.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	
2						1								N	
12:00AM														1	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12/11/201 2 12:00AM	MESAVERDE/			6,253.0	6,257.0	4.00		0.360	EXP/	3.375	90.00			PRODUCTIO N	
12/11/201 2 12:00AM	MESAVERDE/			6,622.0	6,624.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			6,646.0	6,647.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	Was the Was
12/11/201 2	MESAVERDE/			6,658.0	6,659.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM 12/11/201 2	MESAVERDE/			6,686.0	6,688.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM 12/11/201 2	MESAVERDE/			6,697.0	6,698.0	3.00		0,360	EXP/	3.375	120.00	***************************************	23.00	PRODUCTIO N	
12:00AM 12/11/201 2	MESAVERDE/		CORP THE CONTRACTOR CO	6,779.0	6,780.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
2	MESAVERDE/		and the second s	6,855.0	6,857.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
2	MESAVERDE/			6,906.0	6,908.0	3.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.360	EXP/	3.375	120.00	TALL ALSO THE THE THEORY MANY, W	23.00	PRODUCTIO N	
2	MESAVERDE/		THE PROPERTY OF THE PROPERTY O	6,940.0	6,942.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
2	MESAVERDE/			7,017.0	7,018.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
2	MESAVERDE/		To compare the state of the sta	7,041.0	7,042.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
2	MESAVERDE/			7,064.0	7,065.0	3.00	www.lawanovovy.ra.h.	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM 12/11/201 2 12:00AM	MESAVERDE/			7,202.0	7,203.0	3.00	and modification of AFA and particular parti	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12/11/201 2	MESAVERDE/			7,223.0	7,224.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO	
12:00AM															
12/11/201 2	MESAVERDE/			7,250.0	7,252.0	3.00		0.360	EXP/	3.375	120.00	THE THE WAR AS JOHN WE MANAGEMENT THE STREET, AND ASSESSED AS A STREET, AS A STREET, AS A STREET, AS A STREET,	23.00	PRODUCTIO N	
12:00AM												1 II 1 1		: 	
2	MESAVERDE/			7,331.0	7,332.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM															
2	MESAVERDE/	Total Paris Control		7,410.0	7,412.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	: 							! !						<u> </u>	
2	MESAVERDE/			7,430.0	7,432.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM		. 3		ļi										<u> </u>	.,
2	MESAVERDE/	B.41111.1188.4181.1		7,494.0	7,496.0	3.00		0.360	EXP/	3,375	120.00		23.00	PRODUCTIO N	
12:00AM	14-5 11 #PBBP/			7 000 0				0.000	#****	0.075	400.00	Photos colonia (della colonia)			
12/11/201 2 12:00AM	MESAVERDE/			7,686.0	7,687.0	3.00		0.360	EXP	3.375	120.00		23.00	PRODUCTIO N	Managara Anna Anna Anna Anna Anna Anna Anna A
	MESAVERDE/			7,709.0	7,710.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	
2 12:00AM				1,100.0	.,,	0.00		0.000		0.07	ORDER TO AND THE SECOND		20.00	N	
12/11/201 2 12:00AM	MESAVERDE/			7,725.0	7,727.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			7,754.0	7,756.0	3.00	**************************************	0.360	EXP/	3.375	120.00	LE BERT SETTLE VERTICAL SECTION OF LANGUAGE STREET	23.00	PRODUCTIO N	
12:00AM		,									1				
1 2/1 1/ 201 2	MESAVERDE/			7,770.0	7,771.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM						į			M 1111						
2	MESAVERDE/			7,784.0	7,785.0	3.00		0.360	EXP/	3.375	120.00	; ;	23.00	PRODUCTIO N	
12:00AM											j.				
2	MESAVERDE/			7,822.0	7,823.0	3.00	!	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM															
12/11/201 2 12:00AM	MESAVERDE/			7,833.0	7,834.0	3.00	Monagement .	0.360	EXP/	3.375	120.00	a distance		PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12/11/201 2 12:00AM	MESAVERDE/			7,906.0	7,907.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12/11/201 2 12:00AM	MESAVERDE/			7,938.0	7,940.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12/11/201 2 12:00AM	MESAVERDE/			7,950.0	7,952.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic



	Assets and a						KIES RI Summa	EGION ary Report				
Well: NBU 1022-	Well: NBU 1022-11J1CS BLUE Spud Date: 5/23/2012											
Project: UTAH-UI	INTAH			Site: NBU	1022-11	J PAD		Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3				
Event: COMPLET	TION	End Date: 1/7/2013										
Active Datum: Rh Level)	≺B @5,0	97.00usft (a	above Mean Se	a	UWI: NW/SE/0/10/S/22/E/11/0/0/26/PM/S/1990/E/0/2130/0/0							
Date		Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)				
5/23/2012		-			-	A. O.						
12/11/2012	10:15	- 11:00	0.75	FRAC	33	C	P	FILL SURFACE CSG. MIRU B&C QUICK TEST.				
								1ST PSI TEST T/7000 PSI. HELD FOR 15 MIN LOST				
								69 PSI.				
								NO COMMUNICATION OR MIGRATION WITH				
								SURFACE CSG				
12/13/2012	8:00	- 11:00	3.00	FRAC	37		Р	BLEED OFF PSI. SWIFN				
		11.00	0.00	11010	07		•	PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER PERF				
								DESIGN. POOH, SWFW				
12/18/2012	6:30	- 7:30	1.00	FRAC	48		P	JSA-SAFETY MEETING, TEST SURFACE LINE TO				
								8600#, LOST 460# IN 15 MIN,				

Well: NBU 1022-11J1CS BLUE			Spud Date: 5/23/2012
Project: UTAH-UINTAH	Site: NBL	J 1022-11J PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION	Start Date	e: 12/11/2012	End Date: 1/7/2013
Active Datum: RKB @5,097.00usft (abo Level)	ve Mean Sea	UWI: NW/SE/0/10	D/S/22/E/11/0/0/26/PM/S/1990/E/0/2130/0/0
Date Time Start-End	Duration Phase (hr)	Code Sub	P/U MD From Operation (usft)
7:30 - 17:00	9.50 FRAC	36 E	P PERF & FRAC FOLLOWING WELL AS PER DESIGN W 30/50 MESH SAND & SLK WTR. ALL CBP'S ARE HALIBURTON &K CBP'S. REFER TO STIM PJR FOR FLIUD, SAND AND CHEMICL VOLUME PUMTD (FRAC STG #1) WHP = 1499 #, BRK DN PERFS = 4310 #, @ 4.7 BPM, ISIP = 2521 #, FG = 0.76, CALC PERF OPEN @ 50.1 BPM, @ 4317 # = 100%, (21/21 HOLES OPEN,) FINAL ISIP = 2555 #, FINAL FG = 0.76, NET PRESSURE INCREASE = 18 #, MAX PSI = 6302 #, MAX RATE = 50.6 BPM, AVERAGE PSI = 4607 #, AVERAGE RATE = 48.9 BPM, X OVER TO WIRE LINE (PERF STG #2) P/J 4 ½" HALLIBURTON 8K CBP & 3 1/8" PERF GUN, 23 GM, 0.36 HOLE SIZE, 90 - 120" PHASING, RIH SET CBP @ = 7795 *, PERF AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW (FRAC STG #2) WHP = 1009 #, BRK DN PERFS = 2993 #, @ = 41. BPM, ISIP = 2149 #, FG = 0.72, CALC PERF OPEN @ 50.1 BPM, @ 5109 PSI = 83 %, (20/24 HOLES OPEN) FINAL ISIP = 2733 #, FINAL FG = 0.79, NET PRESSURE INCREASE = 584 #, MAX PSI = 5322 #, MAX RATE = 50.5 BPM, AVERAGE PSI = 4656 #, AVERAGE RATE = 48.3 BPM, X OVER TO WIRE LINE (PERF STG #3) P/J 4 ½" HALLIBURTON 8K CBP & 3 1/8" PERF GUN, 23 GM, 0.36 HOLE SIZE, 90 - 120" PHASING, RIH SET CBP @ 7526 *, PERF AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW (FRAC STG #3) WHP = 1038#, BRK DN PERFS = 3157 #, @ 4.5 BPM, ISIP = 2072 #, F.G = 0.70, CALC PER OPEN @ 50.3 BPM @ 4539 PSI = 100 %, (21/21 HOLES OPEN) FINAL ISIS = 2368 #, INNAL F.G. = 0.76, NET PRESSURE INCREACE = 296 #, MAX PSI = 4876 #, MAX RATE = 52.3 BPM, AVERAGE PSI = 4144 #, AVERAGE RATE = 51.3 BPM X OVER TO WIRE LINE (PERF STG #4) P/J 4 ½" HALLIBURTON 8K CBP & 3 115" PERF GUN, 23 GM, 0.36 HOLE SIZE, 90 - 120" PHASING, RIH SET CBP @ 77822*, PERF AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW (FRAC STG #4) P/J 4 ½" HALIBURTON 8K CBP & 3 115" PERF GUN, 23 GM, 0.36 HOLE SIZE, 90 - 120" PHASING, RIH SET CBP @ 77822*, PERF AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW (FRAC STG #4) WHP =639 #, BRK DN PERFS
			(FRAC STG #4) WHP =639 #, BRK DN PERFS =4433 #, @ 4.7 BPM, ISIP = 1727 #, FG = 0.68 , CALC PERF OPEN @ 49.7 BPM @ 4817 PSI = 95 %, (20/21) HOLES OPEN,

		US RC	CKIES RE	
Well: NBU 1022-11J1CS BLUE				Spud Date: 5/23/2012
Project: UTAH-UINTAH	Site: NBU	J 1022-11J PAD		Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION	Start Dat	e: 12/11/2012		End Date: 1/7/2013
Active Datum: RKB @5,097.00usft (above Me Level)	ean Sea	UWI: NW/SE/0)/10/S/22/E/1	1/0/0/26/PM/S/1990/E/0/2130/0/0
Date Time Durat Start-End (hr		Code Sub	W. Destroy (1988)	MD From Operation (usft)
				FINAL ISIP = 2388 #, FINAL FG = 0.77 , NET PRESSURE INCREASE = 661 #, MAX PSI = 6761 #, MAX RATE = 50.7 BPM,
12/19/2012 7:30 - 8:00 0.5	0 FRAC	48	P	AVERAGE PSI = 4280 #, AVERAGE RATE = 49.6 BPM, X OVER TO WIRE LINE JSA-SAFETY MEETING

1/23/2013

3:47:30PM

Operation Summary Report

Well: NBU 1022	2-11J1CS BLUE						Spud Date: 5/2	3/2012
Project: UTAH-	UINTAH	Site: NBI	Site: NBU 1022-11J PAD				Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3	
Event: COMPLI	Start Daf	te: 12/11/2	2012			End Date: 1/7/2013		
Active Datum: F Level)	RKB @5,097.00usft (a	ibove Mean Se	a	UWI: N	N/SE/0/10	3/S/22/E/1	11/0/0/26/PM/S/1	990/E/0/2130/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	8:00 - 13:00	5.00	FRAC	36	Ė	Р		(PERF STG #5) P/U 4 1/2" HALIBURTON 8K CRP & 3

(PERF STG #5) P/U 4 1/2" HALIBURTON 8K CBP & 3 1/8" PERF GUN, 23 GM, 0.36 HOLE SIZE, 90 – 120* PHASING, RIH SET CBP @ = 6972 ', PERF AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW

(FRAC STG #5) WHP = 2298 #, BRK DN PERFS = 5011 #, @ = 4.8 BPM, ISIP = 1408 #, F G = 0.65 , CALC PERF OPEN @ 50.2 BPM @ 3779 PSI = 100 %, (21/21 HOLES 0PEN) FINAL ISIP = 2389 #, FINAL F G = 0.79 , NET PRESSURE INCREASE = 909 #, MAX PSI = 5011 #, MAX RATE = 50.7 BPM, AVERAGE PSI = 4003 #, AVERAGE RATE = 49 BPM, X OVER TO WRE LINE

(PERF STG #6) P/U 4 ½" HALIBURTON 8K CBP & 3 1/8" PERF GUN, 23 GM, 0.36 HOLE SIZE, 90 – 120* PHASING, RIH SET CBP @ = 6728 ', PERF AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW

(FRAC STG #6) WHP = 304 #, BRK DN PERFS = 2343 #, @ 4.3 BPM, ISIP = 1155 #, F G = 0.61, CALC PERF OPEN @ 50.1 BPM @ 3296 PSI = 100 %

(21/21 HOLES OPEN,) FINAL ISIP = 2262 #, FINAL F G = 0.78 , NET PRESSURE INCREASE \approx 1107 PSI. MAX PSI = 5164 #, MAX RATE = 50.5 BPM, AVERAGE PSI = 4642 #. AVERAGE RATE = 50 BPM,

X OVER TO WIRE LINE

(PERF STG #7) P/U 4 ½" HALLIBURTON 8K CBP & 3 1/8" PERF GUN, 23 gm, 0.36 HOLE SIZE, 90 – 120* PHASING, RIH SET CBP @ = 6287 ', PERF AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW

(FRAC STG #7) WHP = 306 #, BRK DN PERFS = 2113 #, @ = 4.1 BPM, ISIP = 1169 #, F G = 0.63 , CALC PERF OPEN @ 50.3 BPM @ 4480 PSI = 71 %, (17/24 HOLES OPEN) FINAL ISIP = 2170 #, FINAL F G = 0.79 , NET PRESSURE INCREASE = 101 PSI, MAX PSI = 5076 #, MAX RATE = 50.7 BPM, AVERAGE PSI = 3080 #, AVERAGE RATE = 47.7 BPM, X OVER TO WRE LINE

(KILL PLUG) P/U RIH W/ HALIBURTON 8K CBP, SET FOR TOP KILL @ = 6188' R/D WIRELINE AND FRAC CREW, SHUT WELL IN.

TOTAL FLUID PUMP'D = 6766 BBLS

1/23/2013 3:47:30PM

Operation Summary Report

					Opera	tion S	umma	ry Report	
Well: NBU 1022-	11J1CS	BLUE						Spud Date: 5/2	3/2012
Project: UTAH-L	INTAH			Site: NBL	J 1022-11	J PAD			Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLE	TION			Start Date	e: 12/11/2	012			End Date: 1/7/2013
Active Datum: R Level)	KB @5,0	97.00usft (ab	ove Mean S	ea	UWI: N\	N/SE/0/1	0/S/22/E/1	11/0/0/26/PM/S/1	990/E/0/2130/0/0
Date		Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
12/20/2012		ے							TOTAL SAND PUMP'D = 134835#
1/4/2013	7:00	- 7:15	0.25	DRLOUT	48		Р		HSM-JSA
1/7/2013	7:15	- 15:00 - 7:15	7.75 0.25	DRLOUT	31	I	P		MIRU, NDWH, NUBOP, PU 3 7/8" BIT & POBS W/ XN SN, RIH W/ 195 JTS 2 3/8" L-80 TBG TAG FILL @ 6,178', RU PWR SWVL, SWI, SDFWE HSM-JSA
	7:15	- 7:15	0.00	DRLOUT	44	С	Р		BRK CIRC, PRESS TEST BOP TO 3,000 PSI LOST 0 PSI IN 15 MIN.
									C/O 10' SAND TAG PLUG #1 @ 6,188', DRL HAL 8K CBP IN 7 MIN, 0 PSI INC, FCP 0 PSI, RIH TAG FILL @ 6,267'.
									C/O 20' SAND TAG PLUG #2 @ 6,287', DRL HAL 8K CBP IN 6 MIN, 200 PSI INC, FCP 50 PSI, RIH TAG FILL @ 6,713'.
									C/O 15' SAND TAG PLUG #3 @ 6,728', DRL HAL 8K CBP IN 5 MIN, 300 PSI INC, FCP 100 PSI, RIH TAG FILL @ 6,942'.
									C/O 30' SAND TAG PLUG #4 @ 6,972', DRL HAL 8K CBP IN 5 MIN, 100 PSI INC, FCP 100 PSI, RIH TAG FILL @ 7,247'.
									C/O 35' SAND TAG PLUG #5 @ 7,282', DRL HAL 8K CBP IN 6 MIN, 200 PSI INC, FCP 300 PSI, RIH TAG FILL @ 7,496'.
									C/O 30, SAND TAG PLUG #6 @ 7,526', DRL HAL 8K CBP IN 6 MIN, 100 PSI INC, FCP 350 PSI, RIH TAG FILL @ 7,765'.
									C/O 30' SAND TAG PLUG #7 @ 7,795', DRL HAL 8K CBP IN 5 MIN, 500 PSI INC, FCP 500 PSI, RIH TO 8,255' (303' BLW BTM PERF) NO TAG, CIRC CLEAN, RD PWR SWWL, POOH LD 19 JTS TBG, LAND W/ 241 JTS 2 3/8" L-80 EOT @ 7,653.95', RD FLOOR & TBG EQUIP, NDBOP, NUWH, DROP BALL POBS @ 1,650 PSI, PRESS TEST FLOWLINE BETWEEN HAL 9,000 & WELLHEAD TO 3,000 PSI, LET BIT FALL 20 MIN TURN OVER TO FBC, RDMO, SDFN.
									KB-19' HANGER83' 241 JTS 2 3/8" L-80-7,631.92' POBS W/ XN SN-2.20' EOT @ 7,653.95'
	7:15	- 7:15	0.00	DRLOUT	50				TWTR=7,006 BBLS TWR=1,822 BBLS TWLTR=5,184 BBLS WELL TURNED TO SALES@ 14:00 HR ON 1/7/2013. 1600 MCFD, FCP 1836#, FTP 1675#, 20/64" CK.

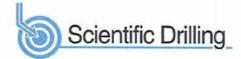
1/23/2013 3:47:30PM

US ROCKIES REGION Operation Summary Report Well: NBU 1022-11J1CS BLUE Spud Date: 5/23/2012 Site: NBU 1022-11J PAD Project: UTAH-UINTAH Rig Name No: ROCKY MOUNTAIN WELL SERVICE Event: COMPLETION Start Date: 12/11/2012 End Date: 1/7/2013 Active Datum: RKB @5,097.00usft (above Mean Sea UWI: NW/SE/0/10/S/22/E/11/0/0/26/PM/S/1990/E/0/2130/0/0 Level) Code P/U Time Duration Sub MD From Operation Start-End (hr) Code (usft) 7:00 1/12/2013 50 WELL IP'D ON 1/12/13 - 1983 MCFD, 205 BWPD, 0 BOPD, CP 1387#, FTP 839#, LP 345#, 24 HRS, CK

20/64

1/23/2013

3:47:30PM



+E/-W 0.00

Northing 14516099.55

Project: Uintah County, UT UTM12 Site: NBU 1022-11J PAD Well: NBU 1022-11J1CS

Longitude -109.404686

Wellbore: OH Design: OH

Latittude

39,961710



GL 5078 & KB 19 @ 5097.00ft (PIONEER 54)

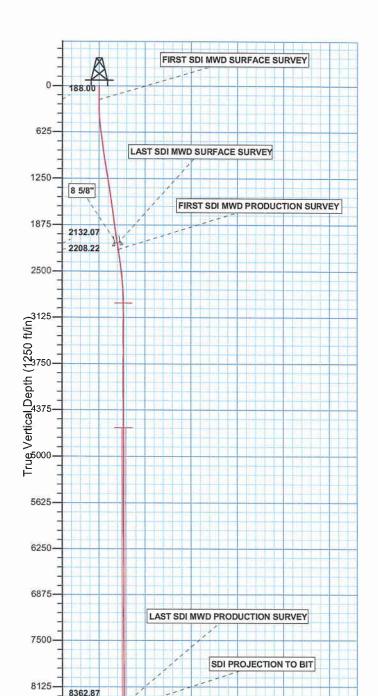
Easting 2087457,27





Azimuths to True North Magnetic North: 11.04°

Magnetic Field Strength: 52330.1snT Dip Angle: 65.86° Date: 05/11/2011 Model: IGRF2010



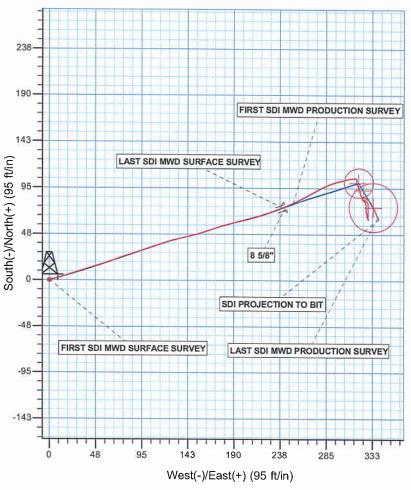
1250

Vertical Section at 72.63° (1250 ft/in)

3125

8415.82

8750



PROJECT DETAILS: Uintah County, UT UTM12

Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 - Western US
Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)
Location: SECTION 11 T10S R22E

System Datum: Mean Sea Level

Design: OH (NBU 1022-11J1CS/OH)

Created By: Gabe Kendall Date: 14:02, September 18 2012



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 1022-11J PAD NBU 1022-11J1CS

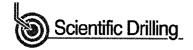
OH

Design: OH

Standard Survey Report

18 September, 2012







Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site: Well:

NBU 1022-11J PAD NBU 1022-11J1CS

Wellbore: Design:

OH ОН Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well NBU 1022-11J1CS

GL 5078 & KB 19 @ 5097.00ft (PIONEER 54)

GL 5078 & KB 19 @ 5097.00ft (PIONEER 54)

Minimum Curvature

EDM 5000.1 Single User Db

Project

Uintah County, UT UTM12

Map System: Geo Datum:

Universal Transverse Mercator (US Survey Feet)

NAD 1927 - Western US

Map Zone:

Zone 12N (114 W to 108 W)

System Datum:

Mean Sea Level

Site

NBU 1022-11J PAD, SECTION 11 T10S R22E

Site Position:

Lat/Long

Northing: Easting:

14,516,109.41 usft 2,087,458,22 usft

Latitude: Longitude:

Position Uncertainty:

0.00 ft

Slot Radius:

13.200 in

Grid Convergence:

-109.404682

1.02°

Well

From:

NBU 1022-11J1CS, 1990 FSL 2130 FEL

Well Position

+N/-S +E/-W 0.00 ft 0.00 ft

Northing:

Easting:

14,516,099.56 usft 2,087,457.27 usft Latitude: Longitude:

39.961710 -109.404686

Position Uncertainty

0.00 ft

Wellhead Elevation:

Ground Level:

5,078.00 ft

Wellbore

ОН

Magnetics

Model Name

IGRF2010

Sample Date

05/11/11

0.00

Declination (°)

Dip Angle (°)

Field Strength (nT)

72.63

52,330

Design

Audit Notes:

1.0

OH

Phase:

ACTUAL

(ft)

0.00

11 04

65.86

0.00

Version: Vertical Section:

Depth From (TVD)

+N/-S

Tie On Depth: +E/-W (ft)

0.00

Direction

Survey Program 09/18/12

From

(ft)

То

(ft) Survey (Wellbore) **Tool Name**

Description

15.00 2,227.00 2,150.00 Survey #1 SDI MWD SURFACE (OH) 8,440.00 Survey #2 SDI MWD PRODUCTION (OH) MWD SDI MWD SDI

MWD - Standard ver 1.0.1 MWD - Standard ver 1.0.1

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00
188.00	0.26	319.41	188.00	0.30	-0.26	-0.15	0.15	0.15	0.00
FIRST SDI N	IWD SURFACE S	SURVEY							
273.00	1.23	88.43	272.99	0.47	0.53	0.65	1.66	1.14	151.79
356.00	2.62	75.74	355.94	0.96	3.26	3.40	1.74	1.67	-15.29
446.00	4.26	75.16	445.78	2.32	8.49	8.79	1.82	1.82	-0.64
536.00	5.18	72.66	535.47	4.39	15.60	16.19	1.05	1.02	-2.78
626.00	6.51	72.35	625.00	7.15	24.34	25.36	1.48	1.48	-0.34
716.00	8.09	71.91	714.27	10.66	35.22	36.79	1.76	1.76	-0.49





Company: Project: Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

Site: Well: NBU 1022-11J PAD NBU 1022-11J1CS

Wellbore: OH
Design: OH

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well NBU 1022-11J1CS

GL 5078 & KB 19 @ 5097.00ft (PIONEER 54)

GL 5078 & KB 19 @ 5097.00ft (PIONEER 54) True

Minimum Curvature

EDM 5000.1 Single User Db

	aga Pilkari								
Measured			Vertical		1000000	Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
806.00	8.52	72.35	803.33	14.65	47.59	49.79	0.48	0.48	0.49
896.00	9.15	71.82	892.26	18.90	60.74	63.62	0.71	0.70	-0.59
986.00	8.97	70.59	981.14	23.47	74.16	77.78	0.29	-0.20	-1.37
1,076.00	9.32	70.94	1,069.99	28.18	87.66	92.08	0.39	0.39	0.39
1,166.00	9.50	71.47	1,158.78	32.92	101.59	106.79	0.22	0.20	0.59
1,256.00	9.29	71.38	1,247.57	37.60	115.52	121.48	0.23	-0.23	-0.10
1,346.00	8,18	74.98	1,336.53	41.58	128,59	135,14	1.37	-1.23	4.00
1,436.00	8.44	76.48	1,425.58	44.78	141.20	148.13	0.38	0.29	1.67
1,526.00	8.35	73.74	1,514.62	48.16	153,89	161,25	0.46	-0.10	-3.04
1,616.00	7.83	70.15	1,603.72	52.07	165.93	173.91	0.40	-0.10 -0.58	-3.0 4 -3.99
1,706.00	8.00	73.49	1,692.87	55.93	177.70	186.30	0.54	0.19	-3.99 3.71
1,796.00	8.47	75.73	1,781.94	59.34	190,13	100.10	0.60	0.50	
1,886.00	8.36	76.48	1,761.94	62.51	202.92	199.18 212.32	0.63 0.17	0.52	2.49
1,976.00	8.51	72.55	1,960.00	66.03	215.63	212.32	0.17	-0.12 0.17	0.83
2,066.00	8.62	69.80	2,048.99	70.36	228.31	238.91	0.66		-4.37
2,150.00	8.44	70.15	2,132.07	74.63	240.02	251.35	0.47	0.12	-3.06
	WD SURFACE S		2,102.07	74.00	240,02	201.00	0.22	-0.21	0.42
2,227.00	8.59	63.39	2,208.22	79.12	250.47	262.67	1.31	0.19	-8.78
	IWD PRODUCTION								
2,322.00	8.35	61.58	2,302.18	85.58	262.88	276.45	0.38	-0.25	-1.91
2,417.00	7.83	61.41	2,396.24	91.96	274.63	289.56	0.55	-0.55	-0.18
2,512.00	6.86	64.49	2,490.46	97.50	285.44	301.53	1.10	-1.02	3.24
2,606.00	6,68	75.56	2,583.81	101.28	295.80	312.54	1.40	-0.19	11.78
2,701.00	4.66	76.97	2,678.34	103.53	304.91	321.91	2.13	-2.13	1.48
2,797.00	2.90	79.08	2,774.12	104.87	311.09	328.21	1.84	-1.83	2,20
2,892.00	1.85	104.04	2,869.04	104.95	314.94	331.91	1.53	-1.11	26.27
2,986.00	0.69	180.30	2,963.02	104.02	316.41	333.03	1.93	-1.23	81.13
3,082.00	0.68	178.97	3,059.02	102.87	316.42	332.70	0.02	-0.01	-1.39
3,176.00	0.88	182.87	3,153.01	101.59	316.39	332.29	0.22	0.21	4.15
3,272.00	1.06	175.67	3,248.99	99.97	316.42	331.84	0.23	0.19	-7.50
3,366.00	1.14	150.79	3,342.98	98.29	316.94	331.83	0.51	0.09	-26.47
3,461.00	1.32	151.41	3,437.95	96,50	317.93	332.24	0.19	0.19	0.65
3,555.00	0.97	147.89	3,531.94	94.88	318.87	332.65	0.38	-0.37	-3.74
3,650.00	1.06	166.53	3,626.92	93.34	319.50	332.80	0.36	0.09	19.62
3,745.00	1.41	177.60	3,721.90	91.32	319.75	332.44	0.44	0.37	11.65
3,840.00	1.41	172.24	3,816.87	88.99	319.96	331.94	0.14	0.00	-5.64
3,935.00	1.76	149.91	3,911.83	86.57	320.85	332.07	0.74	0.37	-23.51
4,030.00	1.41	158.44	4,006.80	84.22	322.01	332.47	0.44	-0.37	8.98
4,125.00	0.18	133.04	4,101.79	83.04	322.55	332.63	1.32	-1.29	-26.74
4,220.00	0.13	61,07	4,196.79	82.99	322.75	332.81	0.20	-0.05	-75.76
4,314.00	0.26	182.43	4,290.79	82.82	322.84	332.84	0.27	0.14	129.11
4,409.00	0.44	107,11	4,385.79	82.50	323.18	333.07	0.47	0.19	-79.28
4,504.00	0.62	126.62	4,480.78	82.09	323.94	333.67	0.27	0.19	20.54





Company: Project Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

Site: Well: NBU 1022-11J PAD NBU 1022-11J1CS

Wellbore: OH Design: OH Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method: Database:

Well NBU 1022-11J1CS

GL 5078 & KB 19 @ 5097.00ft (PIONEER 54) GL 5078 & KB 19 @ 5097.00ft (PIONEER 54)

True

Minimum Curvature

EDM 5000.1 Single User Db

4,694.00 4,789.00 4,883.00 4,976.00 5,071.00 5,166.00 5,262.00 5,357.00 5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,728.00	STATE OF THE PARTY OF THE PARTY OF THE PARTY.	132.95 177.69 148.60 162.31 176.55 172.41 184.98 173.21 168.72 172.33 41.81 161.78 150.18 146.75 313.13	Depth (ft) 4,575.78 4,670.77 4,765.77 4,859.77 4,952.76 5,047.74 5,142.72 5,238.68 5,333.64 5,428.61 5,522.60 5,617.60 5,712.59	+N/-S (ft) 81.58 80.87 79.98 79.13 77.94 76.34 74.23 71.60 68.87 66.35 65.32 65.08	+EI-W (ft) 324.56 324.80 325.05 325.43 325.62 325.78 325.79 325.85 326.28 326.71	334.12 334.13 334.10 334.21 334.04 333.72 333.10 332.37 331.97 331.62	Rate (*/100ft) 0.29 0.47 0.32 0.17 0.34 0.20 0.54 0.39 0.14 0.29	Rate (*/100ff) -0.28 -0.09 0.10 0.28 -0.19 0.45 0.19	Rate (*/100ft) 6.66 47.09 -30.62 14.59 15.31 -4.36 13.23 -12.26 -4.73
4,694.00 4,789.00 4,883.00 4,976.00 5,071.00 5,166.00 5,262.00 5,357.00 5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,728.00	0.62 0.53 0.62 0.88 1.06 1.49 1.67 1.67 1.41 0.18 0.44 0.70 0.88 0.88	177.69 148.60 162.31 176.55 172.41 184.98 173.21 168.72 172.33 41.81 161.78 150.18 146.75	4,670.77 4,765.77 4,859.77 4,952.76 5,047.74 5,142.72 5,238.68 5,333.64 5,428.61 5,522.60 5,617.60 5,712.59	80.87 79.98 79.13 77.94 76.34 74.23 71.60 68.87 66.35	324.80 325.05 325.43 325.62 325.78 325.79 325.85 326.28 326.71	334.13 334.10 334.21 334.04 333.72 333.10 332.37 331.97	0.47 0.32 0.17 0.34 0.20 0.54 0.39 0.14	0.28 -0.09 0.10 0.28 0.19 0.45 0.19	47.09 -30.62 14.59 15.31 -4.36 13.23 -12.26
4,789.00 4,883.00 4,976.00 5,071.00 5,166.00 5,262.00 5,357.00 5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.53 0.62 0.88 1.06 1.49 1.67 1.67 1.41 0.18 0.44 0.70 0.88 0.88	148.60 162.31 176.55 172.41 184.98 173.21 168.72 172.33 41.81 161.78 150.18 146.75	4,765.77 4,859.77 4,952.76 5,047.74 5,142.72 5,238.68 5,333.64 5,428.61 5,522.60 5,617.60 5,712.59	79.98 79.13 77.94 76.34 74.23 71.60 68.87 66.35	325.05 325.43 325.62 325.78 325.79 325.85 326.28 326.71	334.13 334.10 334.21 334.04 333.72 333.10 332.37 331.97	0.47 0.32 0.17 0.34 0.20 0.54 0.39 0.14	0.28 -0.09 0.10 0.28 0.19 0.45 0.19	47.09 -30.62 14.59 15.31 -4.36 13.23 -12.26
4,883.00 4,976.00 5,071.00 5,166.00 5,262.00 5,357.00 5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,210.00 6,400.00 6,400.00 6,590.00 6,590.00 6,85.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.62 0.88 1.06 1.49 1.67 1.67 1.41 0.18 0.44 0.70 0.88 0.88 2.11	162.31 176.55 172.41 184.98 173.21 168.72 172.33 41.81 161.78 150.18 146.75	4,859.77 4,952.76 5,047.74 5,142.72 5,238.68 5,333.64 5,428.61 5,522.60 5,617.60 5,712.59	79.13 77.94 76.34 74.23 71.60 68.87 66.35	325.43 325.62 325.78 325.79 325.85 326.28 326.71	334.21 334.04 333.72 333.10 332.37 331.97	0.17 0.34 0.20 0.54 0.39 0.14	0.10 0.28 0.19 0.45 0.19	-30.62 14.59 15.31 -4.36 13.23 -12.26
4,976.00 5,071.00 5,166.00 5,262.00 5,357.00 5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.88 1.06 1.49 1.67 1.67 1.41 0.18 0.44 0.70 0.88 0.88 2.11	176.55 172.41 184.98 173.21 168.72 172.33 41.81 161.78 150.18 146.75	4,952.76 5,047.74 5,142.72 5,238.68 5,333.64 5,428.61 5,522.60 5,617.60 5,712.59	77.94 76.34 74.23 71.60 68.87 66.35	325.62 325.78 325.79 325.85 326.28 326.71	334.04 333.72 333.10 332.37 331.97	0.34 0.20 0.54 0.39 0.14	0.28 0.19 0.45 0.19	15.31 -4.36 13.23 -12.26
5,071.00 5,166.00 5,262.00 5,357.00 5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.06 1.49 1.67 1.67 1.41 0.18 0.44 0.70 0.88 0.88	172.41 184.98 173.21 168.72 172.33 41.81 161.78 150.18 146.75	5,047.74 5,142.72 5,238.68 5,333.64 5,428.61 5,522.60 5,617.60 5,712.59	76.34 74.23 71.60 68.87 66.35	325.78 325.79 325.85 326.28 326.71	333.72 333.10 332.37 331.97	0.20 0.54 0.39 0.14	0.19 0.45 0.19	-4.36 13.23 -12.26
5,166.00 5,262.00 5,357.00 5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,890.00 6,885.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.49 1.67 1.67 1.41 0.18 0.44 0.70 0.88 0.88	184.98 173.21 168.72 172.33 41.81 161.78 150.18 146.75	5,142.72 5,238.68 5,333.64 5,428.61 5,522.60 5,617.60 5,712.59	74.23 71.60 68.87 66.35	325.79 325.85 326.28 326.71	333.10 332.37 331.97	0.54 0.39 0.14	0.45 0.19	13.23 -12.26
5,262.00 5,357.00 5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.67 1.67 1.41 0.18 0.44 0.70 0.88 0.88	173.21 168.72 172.33 41.81 161.78 150.18 146.75	5,238.68 5,333.64 5,428.61 5,522.60 5,617.60 5,712.59	71.60 68.87 66.35 65.32	325.85 326.28 326.71	332.37 331.97	0.39 0.14	0.45 0.19	13.23 -12.26
5,357.00 5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.67 1.41 0.18 0.44 0.70 0.88 0.88	168.72 172.33 41.81 161.78 150.18 146.75	5,333.64 5,428.61 5,522.60 5,617.60 5,712.59	68.87 66.35 65.32	326.28 326.71	331.97	0.14	0.19	-12.26
5,452.00 5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.41 0.18 0.44 0.70 0.88 0.88	172.33 41.81 161.78 150.18 146.75	5,428.61 5,522.60 5,617.60 5,712.59	66.35 65.32	326.71				
5,546.00 5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.18 0.44 0.70 0.88 0.88	41.81 161.78 150.18 146.75	5,522.60 5,617.60 5,712.59	65.32		331.62			
5,641.00 5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,348.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.44 0.70 0.88 0.88	161.78 150.18 146.75	5,617.60 5,712.59		326.06			-0.27	3.80
5,736.00 5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.70 0.88 0.88 2.11	150.18 146.75	5,712.59	&E 00	JZ0.90	331.56	1.63	-1.31	-138.85
5,831.00 5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,348.00 7,348.00 7,348.00 7,538.00 7,633.00 7,728.00	0.88 0.88 2.11	146.75		80,08	327.18	331.69	0.58	0.27	126.28
5,926.00 6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,348.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.88 2.11			64.23	327.58	331.82	0.30	0.27	-12.21
6,021.00 6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,633.00 7,728.00	2.11	313.13	5,807.59	63.12	328.27	332.14	0.20	0.19	-3.61
6,116.00 6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,538.00 7,633.00 7,728.00			5,902.58	63.01	328.14	331.98	1.84	0.00	175.14
6,210.00 6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,538.00 7,633.00 7,728.00	1.76	359.01	5,997.55	65.26	327.57	332,12	1.71	1.29	48.29
6,305.00 6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00		4.63	6,092.50	68.46	327.66	333.16	0.42	-0.37	5.92
6,400.00 6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.69	1.26	6,186.45	71.28	327.81	334.14	0.13	-0.07	-3.59
6,495.00 6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,538.00 7,633.00 7,728.00	1.09	356.16	6,281.43	73,58	327.78	334.80	0.64	-0.63	-5.37
6,590.00 6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.06	10.34	6,376.41	75.35	327.87	335.42	0.28	-0.03	14.93
6,685.00 6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.88	349.78	6,471.40	76.93	327.90	335.92	0.41	-0.19	-21.64
6,780.00 6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.84	6.97	6,566.38	78.34	327.86	336.30	0.27	-0.04	18.09
6,874.00 6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.35	347.05	6,661.38	79.32	327.88	336.61	0.55	-0.52	-20.97
6,969.00 7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.35	326.87	6,756.37	80.54	327.20	336,32	1.08	1.05	-21.24
7,063.00 7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.32	318.40	6,850.34	82.27	325.88	335.58	0.21	-0.03	-9.01
7,158.00 7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.06	283.95	6,945.32	83.30	324.30	334.38	0.79	-0.27	-36.26
7,253.00 7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	1.14	272.00	7,039.31	83.55	322.52	332.75	0.26	0.09	-12.71
7,348.00 7,443.00 7,538.00 7,633.00 7,728.00	0.70	2.26	7,134.30	84.16	321.60	332.06	1.41	-0.46	95.01
7,443.00 7,538.00 7,633.00 7,728.00	0.88	25.37	7,229.29	85.40	321.93	332.75	0.38	0.19	24.33
7,538.00 7,633.00 7,728.00	0.53	27.04	7,324.28	86.45	322.45	333.55	0.37	-0.37	1.76
7,633.00 7,728.00	0.50	132.58	7,419.28	86.56	322.95	334.07	0.86	-0.03	111.09
7,728.00	0.97	119.94	7,514.27	85.88	323.95	334.82	0.52	0.49	-13.31
	1.14	117.57	7,609.25	85.04	325.49	336.03	0.18	0,18	-2.49
7.823.00	1.41	122.84	7,704.23	83.97	327.31	337.45	0.31	0.28	5.55
.,	1.67	138.75	7,799.20	82,29	329,20	338.76	0.52	0.27	16.75
7,918.00	1.76	144.03	7,894.15	80.07	330.97	339.78	0.19	0.09	5.56
8,012.00	1.71	163.04	7,988.11	77.56	332.23	340.23	0.61	-0.05	20.22
8,107.00	1.76	150.79	8,083.07	74.93	333.35	340.52	0.39	0.05	-12.89
8,202.00	2.11	153.69	8,178.01	72.09	334.84	341.10	0.38	0.37	3.05
8,296.00		161.43	8,271.95	68.83	336.18	341.40	0.32	0.10	8.23
8,387.00	2.20	152.82	8,362.87	65.37	337.66	341.78	0.55	0.38	-9.46
LAST SDI MWD PROD		SURVEY							





Company:

Kerr McGee Oil and Gas Onshore LP

Project: Site:

Well:

Uintah County, UT UTM12 NBU 1022-11J PAD NBU 1022-11J1CS

Wellbore: Design:

ОН ОН Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well NBU 1022-11J1CS

GL 5078 & KB 19 @ 5097.00ft (PIONEER 54) GL 5078 & KB 19 @ 5097.00ft (PIONEER 54)

Minimum Curvature

EDM 5000.1 Single User Db

Survey

Measured		Vertical			Vertical			
						Dogleg	Build Turn	
Depth Inclination		Depth						
Depth Inclination	Azimuth		+N/-S	+E/-W	Section	Rate	Rate Rate	
(ft) (°)	(%)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft) (°/100ft	

PW1107 19 2/2/10 0/ 1 1/1 0 10 00 00 00 00 00 00 00 00 00 00 00	2,171.00	2,152.84	8 5/8"	neng amana mahamata di Parishina di Anara Amera (19)	8.62	5 11.000	
Me		ertical Depth (ft)		Name	Casing Diameter (in)	Hole Diameter (in)	
Casing Points				The state of the s	 A property of the control of the property of the control of the cont	endergram and state of a finished state of the state of	Size to define the delaking

Design Annotations	5055 200 A Superior Co.		n de vietne projekte se en e r er. Indivietne plade musik se en er	
Measured	Vertical	Local Coo	dinates	A CAMBRIO AND A CAMBRIO AN A CAMBRIO AND A CAMBRIO A A CAMBRIO AND A C
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
188.00	188.00	0.30	-0.26	FIRST SDI MWD SURFACE SURVEY
2,150.00	2,132.07	74.63	240.02	LAST SDI MWD SURFACE SURVEY
2,227.00	2,208.22	79.12	250.47	FIRST SDI MWD PRODUCTION SURVEY
8,387.00	8,362.87	65.37	337.66	LAST SDI MWD PRODUCTION SURVEY
8,440.00	8,415.82	63.28	338.74	SDI PROJECTION TO BIT

Checked By:	Approved By:	Date	:

Sundry Number: 73871 API Well Number: 43047518430000

	STATE OF UTAH				FORM 9
ı	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI		3	5.LEASE UO1197	DESIGNATION AND SERIAL NUMBER:
SUNDR	Y NOTICES AND REPORTS	ON	WELLS	6. IF INDI	AN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly reenter plugged wells, or to drill horizon n for such proposals.				CA AGREEMENT NAME: IL BUTTES
1. TYPE OF WELL Gas Well					NAME and NUMBER: 22-11J1CS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			9. API NU 430475	MBER: 18430000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021		NE NUMBER: 9 720 929-6		and POOL or WILDCAT: LL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1990 FSL 2130 FEL				COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH	HP, RANGE, MERIDIAN: I1 Township: 10.0S Range: 22.0E Meri	dian:	S	STATE: UTAH	
11. CHECI	K APPROPRIATE BOXES TO INDICA	TE N	ATURE OF NOTICE, REPOR	T, OR 01	THER DATA
TYPE OF SUBMISSION			TYPE OF ACTION		
	ACIDIZE		ALTER CASING		CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING		CHANGE WELL NAME
Approximate date work win start.	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS		CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	RACTURE TREAT		NEW CONSTRUCTION
8/10/2016	OPERATOR CHANGE		PLUG AND ABANDON		PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME		RECLAMATION OF WELL SITE		RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION		SIDETRACK TO REPAIR WELL		TEMPORARY ABANDON
	TUBING REPAIR		/ENT OR FLARE		WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF		SI TA STATUS EXTENSION		APD EXTENSION
nopon suio.		1	OTHER		WORKOVER
	WILDCAT WELL DETERMINATION	•	JIHER		·
A WELLBORE (COMPLETED OPERATIONS, Clearly show CLEANOUT HAS BEEN COMPI PLEASE SEE THE ATTACHED REPORT FOR DETAILS	LETE	ED ON THE NBU	FOR	ccepted by the Utah Division of Gas and Mining RECORD ONLY eptember 02, 2016
NAME (PLEASE PRINT)	PHONE NUMI	BER	TITLE USE Poprocentative		
Candice Barber SIGNATURE	435 781-9749		HSE Representative DATE		
SIGNATURE N/A			8/22/2016		

RECEIVED: Aug. 22, 2016

Sundry Number: 73871 API Well Number: 43047518430000

						KIES R	EGION ary Report					
Well: NBU 1022-	11 I1CS BLUE			Орого	Spud date: 5/23/2012							
Project: UTAH-U			Site: NBI	J 1022-11	J PAD		Opud date: 0/2	Rig name no.: MILES 2/2				
Event: WELL WO	ORK EXPENSE		Start date	e: 8/10/20	16			End date: 8/16/2016				
Active datum: RI	KB @5,097.00usft (ab	oove Mean Se		UWI: NW/SE/0/10/S/22/E/11/0/0/26/PM/S/1			11/0/0/26/PM/S/1					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation				
8/9/2016	7:00 - 9:00	2.00	MAINT	35		P		WELL NAME: NBU 1022-11J1CS Job Code: 80012176 WINS #: E5306 ZID: vmv004 FOREMAN: V4-Jason Hackford MECHANICAL: John Young SLICKLINE COMPANY MLS SLICKLINE OPERATOR Marcus Perry TEL.NUMBER: 435-621-1265 DATE: 8/9/2016 Ex. mm/dd/yy JOB DESCRIPTION Rigged up, RIH w/JDC to 7068' latched plunger POOH. Viper measures 1.874. RIH w/JDC to 7070', latched shearmaster, POOH. Returned well to sales, rigged down. FLUID LEVEL 5500 SEAT NIPPLE DEPTH 7633 SN TYPE Drop Down Menu TD (Max Depth)				
8/10/2016	7:00 - 7:15	0.25	MAINT	48		Р		HSM/ JSA				
	7:15 - 15:00	7.75	MAINT	31	S	Р		MIRU SPOT EQUIP, FCP 40 PSI, CONTROL W/ 20 BBLS TMAC, NDWH, NUBOP, TBG STUCK PULL 70K TO BRK FREE, LD HANGER, PU 1 JT TBG RIH TAG @ SAME DEPTH, MIRU SCAN TECH, POOH SCAN 231 FULL JTS TBG & 24' PIECE, 109 JTS YB & 121 JTS RB, TBG PARTED LEFT 9 FULL JTS & ~7' PIECE IN HOLE, RDMO SCAN TECH, SWIFN.				
8/11/2016	7:00 - 7:15	0.25	MAINT	48		Р		HSM/ JSA				
8/15/2016	7:15 - 19:00 7:00 - 7:15	0.25	MAINT	44	D	P		SICP 200 PSI, CONTROL W/ 20 BBLS TMAC, PU SHOE 5 JTS WP, BS, JAR, 4 DRL CLRS, & INTENSIFIER RIH W/ 218 JTS TBG TAG FILL @ 7241', RU PWR SWVL & WTRFD FU BRK CIRC, C/O TO 7596' CIRC CLN, POOH STD BK 44 JTS TBG, EOT @ 6200' TOP PERF 6238', SWIFWE. HSM/ JSA				
5 5. 20 . 0	7:15 - 11:00	3.75	MAINT	44	D	Р		SICP 550 PSI, CONTROL W/ 20 BBLS TMAC, RIH				
								TAG @ 8156', BRK CIRC C/O TO 8174' TAG FISH @ 8017' CIRC CLN				
	11:00 - 13:00	2.00	MAINT	31	I	Р		POOH STD BK 246 JTS TBG, LD WP, PU OS				
	13:00 - 17:30	4.50	MAINT	31	В	Р		RIH W/ 248 JTS TBG LATCH FISH @ 8017', POOH STD BK TBG, LD TOOLS & 9 JTS FISH, SWIFN				
8/16/2016	7:00 - 7:15	0.25	MAINT	48		Р		HSM/ JSA				

8/22/2016 11:28:22AM 1

Sundry Number: 73871 API Well Number: 43047518430000								
US ROCKIES REGION								
Operation Summary Report								
Well: NBU 1022-		Spud date: 5/23/2012						
Project: UTAH-UINTAH Site: NBI				BU 1022-11J PAD				Rig name no.: MILES 2/2
Event: WELL WORK EXPENSE Start dat				e: 8/10/2016				End date: 8/16/2016
Active datum: RKB @5,097.00usft (above Mean Sea Level)				UWI: NW/SE/0/10/S/22/E/11/0/0/26/PM/S/1990/E/0/2130/0/0				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	7:15 - 12:00	4.75	MAINT	31	I	P		SICP 150 PSI, CONTROL W/ 10 BBLS TMAC, RD PWR SWVL, MIRU NALCO PUMP 30 GAL CORROSION INHIB DWN CSG, PU XN NOTCH CLR RIH W/ 122 JTS TBG, RU SWAB TOOLS BROACH TO 3880', RIH W/ 119 JTS TBG BROACH TO 3900', LAND TBG W/ EOT @ 7652.47', RD FLOOR & TBG EQUIP, NDBOP, NUWH, BLOW WELL AROUND W/ FOAM & N2 UNIT, RDMO. KB-19' HANGER83' 241 JTS 2 3/8" P110- 7652.47' XN NOTCH COLLAR- 1.05' EOT @ 7673.35' C/O TO 8174' PBTD- 8382'
8/18/2016	7:00 - 15:00	8.00	PROD	42	В	Р		Arrived to location, rigged up and bleed pressure down on tubing. Started swabbing made 7 runs fluid level was at, 4500 ft, recovered 34 bbls. Swabbed well back on, well unloaded for a while, dropped spring in and plunger and tripped it once. Rigged down and headed to next well

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